TOUCHDOWN!

A. A. STAGG
AND
W. W. STOUT

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TOUCHDOWN!

AMOS ALONZO STAGG

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As told by Coach

AMOS ALONZO STAGG

to

WESLEY WINANS STOUT

LONGMANS, GREEN AND CO.
55 FIFTH AVENUE, NEW YORK
39 PATERNOSTER ROW, LONDON, E.C.4
TORONTO, BOMBAY, CALCUTTA, MADRAS
1927

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First Edition September 1927
Reprinted September 1927

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TOUCHDOWN!

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As Told by Coach Amos Alonzo Stagg
to Wesley Winans Stout

CHAPTER I

PIGSKIN

WHEN I was a boy in West Orange, New Jersey, in the years just following the Civil War, my father annually bought two shotes in the early spring and fattened them for November butchering. The meat was salted down in part, the hams smoked and the balance ground into sausage, which, with buckwheat cakes, was our winter breakfast seven mornings a week.

Each year I spoke for the bladders of the slaughtered hogs. These bladders we inflated by blowing through a quill. They were the only footballs we knew, and such usually had been the football as far back as it can be traced. From the use of hog bladders rescued from the slaughterhouse came the sport-page term "pigskin," which still clings to the

American football, though neither the bladder nor the outer covering of leather has had for many years the remotest relation to swine.

Although American football is the youngest, basketball excepted, of all major sports—seven of the fifteen original members of the first American football team still are alive—it developed from a game that can be traced back to antiquity, which the earliest explorers found being played in the South Seas, among the Eskimos of the Arctic, and by other aboriginal peoples who conceived it independently through the human desire to kick an object.

On his River of Doubt trip in 1914, Colonel Roosevelt found the primitive Parecis Indians of the Brazilian wilderness enthusiastically playing football with their heads. "They use a light, hollow, rubber ball of their own manufacture," he wrote in "Through the Brazilian Wilderness." "It is circular and about eight inches in diameter. The ball is placed on the ground. A player runs forward, throws himself flat on the ground, and butts the ball toward the opposite side. This first butt, when the ball is on the ground, never lifts it much and it rolls and bounds toward the opponents. One or two of the latter run toward it; one throws himself on the flat of his face and butts the ball back. Usually this butt lifts it, and the ball flies back in a curve well up in the air; and an opposite player,

rushing toward it, catches it on his head with such a swing of his brawny neck and such precision and address that the ball bounds back through the air as a football soars after a drop-kick. Often it will be sent to and fro a dozen times from head to head until it finally rises with such a sweep that it passes far over the heads of the opposite players. Then shrill, rolling cries of good-humored triumph arise from the victors. The ball is never touched with any part of the body but the top of the head. It is hard to decide whether to wonder most at the dexterity and strength with which it is hit or butted with the head, as it comes through the air, or at the reckless speed and skill with which the players throw themselves headlong along the ground to return the ball if it comes low down. Why they do not grind off their noses, I can not imagine."

Football varied in details with time and place, but essentially it was the same—a noisy, pate-cracking, shin-barking horseplay without rules of consequence, between two sides of unlimited numbers, each intent on driving the ball across the other's boundary or goal line by hook, crook or swat; and such it continued to be for no one knows how many thousands of years down almost to the year of my birth. Where the ball was small and hard, rather than an inflated bladder, kicking was not always practical. At Scone, in Perthshire, Scotland, kicking was expressly forbidden centuries

ago. A player ran with the ball until overtaken or blocked, when he tried to pass it to another on his side, much as in Rugby when first played on this side; and "All is fair in the ball at Scone" was a Perthshire proverb. Even women played it, a game between the married women and spinsters being an annual event on Shrove Tuesday at Inverness. Historians have wondered why the married women won invariably. The answer is that the spinsters who distinguished themselves on the field were no longer old maids by the following year, but had been drafted into the Big League.

Probably shinny, hockey and lacrosse are all only variations of the original football.

Football was being played so generally in the narrow, crooked streets of medieval London, to the detriment of shop fronts and the peace of His Majesty's citizens, that Edward II forbade it by royal ukase in 1314. It so kept the yeomen from the practice of archery, upon the native skill of which England depended in war, that Edward III renewed the prohibition in 1365, and every succeeding king seems to have outlawed the sport, all to little effect.

As a pedestrian activity, the gentry would have none of it. Sir Thomas Elyot inveighed against it as a sport unfit for gentlemen "wherein is nothing but beastlie furie and exstreme violence whereof proceedeth hurte." James I forbade the heir ap-

parent to play, describing it as "meeter for laming than making able the users thereof."

Philip Stubbs, the Puritan, called it a "devilishe pastime, a frendlye kinde of fyghting. For dooth not everyone lye in waight for his adversarie, seeking to overthrow him and picke him on his nose, though it be on hard stones, on ditch or dale, on valley or hill, or whatever place it be he careth not; and he that can serve most of this fashion he is counted the only fellow, and who but he? So that by this means sometimes their necks are broken, sometimes their backs, sometimes their legs, sometimes their arms, sometimes their noses gush out with blood, sometimes their eyes start out. But whosoever scapeth away best goeth not scot-free, but either is forewounded, craised or bruised, so as he dyeth of it, or else scapeth very harlie; and no mervaile, for they have the sleights to meet one betwixt two, to dash him against the short ribs with their griped fists, and with their knees to catch him on the hip and picke him on his neck, with a hundred such murthering devices."

Carew, in 1602, was a fairer critic, who saw beyond the surface roughness which so misled the early lay spectators of the American game three centuries later. "You shall see them retiring home as from a pitched battle," he closed a description, "bones broken and out of joint, and such bruises as serve to shorten their days, yet all is good play

and never attorney or coroner troubled for the matter."

When the Puritans came in, all games went out and football was forgotten so completely that it did not revive for 200 years. It returned at Eton, Harrow, Westminster, Winchester, Rugby and those preparatory schools which the British call public, but which are far from being so. It returned about the time of the Napoleonic Wars, and in its old form—an inflated ball kicked in opposite directions by two mobs of boys.

But at once each school adapted the game to its own necessities. Westminster, located in the heart of London, had no playing field but the cobblestone pavements of the cloisters. Tripping, tackling, the use of the hands and the like were too dangerous to limb and destructive of clothing on such a field. Out of this necessity came the modern game of Association, or soccer, as we now know it.

Eton had more room and a softer field, but not sufficiently so as to suggest the use of the hands. There the ball was put into play against the eight-foot brick wall along the Windsor Road. Eton went the Association way, but it contributed one thing to American football—the limiting of a team to eleven men.

But at Rugby there was unlimited turf. Set in an ivied brick wall at Rugby is a tablet which I

saw on one of my trips to England with an Olympic team. It reads:

THIS STONE COMMEMORATES THE EXPLOIT OF WILLIAM WEBB ELLIS, WHO, WITH A FINE DISREGARD FOR THE RULES OF FOOTBALL, FIRST TOOK THE BALL IN HIS ARMS AND RAN WITH IT, THUS ORIGINATING THE DISTINCTIVE FEATURE OF THE RUGBY GAME, A. D. 1823

It has been a similar fine disregard for the rules that has evolved from the Rugby game this very different sport we still call football which fills the Yale Bowl and a hundred other great amphitheaters on autumn Saturday afternoons.

A hundred or so boys were kicking the football on Bigside, Rugby, this fall day 103 years ago. The game had been deadlocked and scoreless for an hour, and the five-o'clock school bell would strike in a moment, leaving the game a draw, when young Ellis, catching a punt, instead of heeling and kicking back as he should have done according to tradition, kept the ball in his arms and dashed through the flabbergasted opposition to the goal line.

He was no hero to be commemorated in tablets then or for some time after. Instead, he either was laughed at as a booby or scorned as a mucker. His innovation, however, opened the eyes of some of

his fellows in time to the possibilities of a game in which the ball might be carried as well as kicked and butted. At first this privilege was limited to balls obtained by fair catches, as in Ellis' case. This experiment lent so much added interest that the rule was expanded to include a ball scooped up on the bound, until shortly all restrictions were removed and Rugby had a game all its own.

The boy who first ran with the ball became a clergyman of the Church of England, was long rector of St. Clement Danes Church in the Strand, London, and died in 1872, the incumbent of Laver Magdalen Church, Essex.

Graduates of the English public schools had carried football into the world before 1860, but match games were made impossible or absurd by the anarchy in the rules. The Blackheath Club, oldest of all, dating from 1858, and the Richmond Club, 1859, tried to agree on a code in 1863 and failed; but the one gathered together other clubs in the Football Association which gave its name to the kicking game, while the other organized the Rugby Union and drew up the groundwork of rules upon which American colleges later were to play strange tunes.

Here were two games. The kicking game was familiar in the United States, the Rugby game was unknown, yet in a few years Rugby virtually exterminated Association in America. Why was that?

It was not entirely that the Rugby of the time was so much a better game to play and more spectacular to watch; in one respect, at least, it was much duller both to play and to watch. My own guess is that Rugby triumphed in part because it had better press agents.

By sheer force of character, Dr. Thomas Arnold, as head master at Rugby from 1828 to 1842, had given the school great prestige. Then a boy named Thomas Hughes attended the school from 1834 to 1840, and in 1858 he wrote a book for boys called Tom Brown's School Days, with Rugby the scene.

The high point in the story was the Schoolhouse versus School football match. The book was a boys' classic, sold enormously both in Great Britain and here, and still sells. Hughes, too, was a friend of James Russell Lowell's, a partisan of the North and the antislavery cause. He visited the United States twice, even founding a coöperative community in Tennessee called Rugby.

In my boyhood none of us had heard of Harrow, Winchester or Westminster. If we knew of Eton, it was only from the Eton jacket, but all of us had followed Tom Brown through Rugby and on up to Oxford in the sequel.

More than this is necessary, though, to an understanding of the game that monopolizes our sport pages from the end of the World's Series until the

first of December. Our early settlers were too busy conquering a wilderness and shooting Indians to have time or need for games, yet the colonists at Jamestown kicked a pig bladder about, as they had done at home, and they passed the sport on to succeeding generations.

All our early colleges were theological seminaries. The long hours left no time for diversions, and the whole tone of higher education was antagonistic. As the country became more settled and an aristocracy appeared along the seaboard, it imposed its own sporting traditions on the schools. The wealthier students began to bring stables of saddle horses and hunters, their dogs and guns, their duello code of honor and their wines to school with them. This was particularly true at Princeton, situated in a village, and the faculty had to prohibit the keeping of horses, dogs and sporting arms before 1800. By 1819 it was forced to make dueling, the sending, receiving or carrying of a challenge, or acting as a second a cause for instant dismissal.

Even in theological schools there always have been high animal spirits and the necessity for an outlet. If there was a major college sport in America from the Revolution down to about 1850, the records would indicate that it was convivial drinking. Athletics, more than all other factors combined, ended hard and regular drinking in the colleges.

Despite the long hours, a succession of chapel and classes from dawn until dusk, and the deadly earnestness of education, its quality was not high by present standards. At a Yale banquet in 1888, the first ever given by the alumni in celebration of an athletic victory, I heard Chauncey Depew say that a graduate of Yale of his time, thirty-two years earlier, could not have passed the freshman entrance examinations of 1888.

The earliest description of college football I find comes from Princeton in the 40's. Evening prayers there came at five o'clock, followed by an hour of leisure before dinner, the only off period of the day. The students had been used to promenading Nassau Street in this hour, while the village ladies strolled at the same hour and place. Presumably some of the student body continued true to chivalry, but others, by this time, were devoting the hour to kicking a pig bladder, which they hired a negro to inflate, and later a round rubber ball, between Princeton east and west college buildings. As many played as liked. Frequently the A's to L's met the M's to Z's. The first side to kick to the wall won. That was goal and game. The ball went into play in center field, the two sides advancing on the charge at a signal and trying to kick it through, or, in lieu of the ball, the other fellow's shins. The only known rule was that the ball could not be touched with the hands. It was a

campus roughhouse, in reality, rather than a game.

I heard Coach Rockne of Notre Dame tell the story that a few years ago, early in the season, he thought it would be a good plan to develop the endurance and speed of his men by playing soccer, so he went to a South Bend sporting goods house and bought an Association ball. Later he took it out on the field and divided his men into two teams, first explaining that they were to kick the ball or kick one another's shins. Some one called him away for two or three minutes and when he came back he could not find the ball. He asked the fellows where it was and one little Irishman spoke up, "To hell with the ball, let's start the game."

Harvard, like other schools, had let off some of its undergraduate steam in annual battles between the freshmen and the sophomores. These free-for-alls were called rushes. At some period a reformer seems to have tossed a football into the fray in the hope of distracting some of the violence from the persons of the participants to the ball. The ball stayed in the fight and the rush came to be called football, but with no such results as hoped for, for in 1860 the faculty forbade the game as sternly as ever did Plantagenet king.

A great procession bore the ball to the Delta, where Memorial Hall now stands, dug a grave, pronounced a funeral oration in the manner of Antony over dead Cæsar, read an ode written for

the occasion and erected a monument over the grave, reading:

HIC JACET
FOOTBALL
FIGHTUM
OBIIT JULY 2, 1860
ÆT LX YEARS
RESURGAT

The age given for the deceased would indicate that some sort of football had been played at Cambridge since 1800, but I find no record of it.

Harvard football moved over to Boston Common until the city, as a result of public protest, closed the Common to the game in 1873. But other players were on the Common before Harvard. As in England, football was cradled here in the secondary schools and played competitively ten years before the first intercollegiate game.

The Football Fightum monument on the Delta has gone long since, but on Boston Common there is a monument today that reads:

ON THIS FIELD THE ONEIDA FOOTBALL CLUB OF BOSTON, THE FIRST ORGANIZED FOOTBALL CLUB IN THE UNITED STATES, PLAYED AGAINST ALL COMERS FROM 1862–1865. THE ONEIDA GOAL WAS NEVER CROSSED

The captain and organizer of the Oneida club, and six others of the original team, still live in September, 1926. He is Gerrit Smith Miller, of Peterboro, New York, eighty-one years old. His football experience goes back to 1856, when it had not long evolved from a free-for-all into an ordered game, and from him I have had the earliest authentic detailed account of the game.

As a boy of eleven or twelve Mr. Miller first met up with football at the Eagleswood School, Eagleswood, New Jersey, and took the game and a ball back to Peterboro with him. The pig bladder with a leather cover already had been superseded for school play by a large round ball of heavy rubber, an eighth of an inch thick, which was blown up with a key. In 1860 Mr. Miller went to Boston to attend the Epes Sargent Dixwell Private Latin School in Boylston Place. He found the game being played at recess and joined in. Boston Public Latin, Boston English High, Roxbury High and Dorchester High also knew the game, and informal matches were being played by these four and the Dixwell School on the Common.

The field had no prescribed length or width. Boston practice was to play about half the width, east and west, of the Common. There were no goal posts, the goal line running the width of the field. Fifteen players constituted a side. Goals were chosen on the flip of a coin, as now; and the kick-

off was from the ground from a point between the center of the field and the kicker's goal, and only after the offensive captain had called, "Warnings," and the defensive captain had answered, "Take them."

The team was so placed as to cover the field. They were known, beginning at the center of the field and working back, as rushers-in, outfielders, backfielders and tender-out, the latter the goal keeper of modern soccer and the safety man of present-day football. When play began it did not stop until a goal was scored, and goal gave game, though a match often was decided by two games out of three. The longest game in which Mr. Miller played ran forty-seven minutes, but one Dixwell contest with Boston Latin School in 1862 lasted two hours and forty-five minutes.

The ball could be kicked, bunted, hit and dribbled, but it could not be carried. Either on catching the ball from the air or in getting it out of bounds by falling upon it, the player was entitled to a free kick, which he took either by camping, similar to punting, or by place kick. Off-side play was called lurking, and, with holding or tripping, was prohibited. The only interference permitted was to men in direct pursuit of the ball, who were allowed to shoulder or push and yank by the shoulders, a forerunner of stiff-arming.

This eyewitness description demonstrates that

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the game, in all essentials, was the same as that which the Blackheath and other London clubs of the Football Association first fixed definitely by rule in 1863.

The school teams were haphazard affairs. Miller was the first to note the advantage of organization and the precision of drilled team play, and formed the Oneida Club to that end in the summer of 1862, with twelve of the better players of Dixwell as a nucleus, augmented by two boys from English High and one from Public Latin. The club took its name from the lake near Miller's New York State home, and red silk handkerchiefs tied around the head and knotted behind distinguished the team, the first step in America toward a football uniform. Such a handkerchief and the round rubber ball used in a famous game between Oneida and a team made up of the pick of Public Latin and English High on November 7, 1863, are preserved in the old Harrison Gray Otis home on Cambridge Street, Boston, now the museum of the Boston Society for the Preservation of New England Antiquities, the only football, to my knowledge, in any historical collection in the world, college trophy rooms excepted.

That seven of the original Oneida fifteen still live, at an average age of more than eighty years, is an unusual example of longevity. Parke H. Davis, of Easton, Pennsylvania, historian of American

football, testifies to having seen one of the seven, Winthrop S. Scudder, of Boston, amid the deluge which descended upon the Harvard-Yale game of 1924 on Soldier's Field, "in a coonskin coat, standing on the sidelines, and with his eighty years defying, like Ajax, the rain, the hail, the thunder and lightning . . . was the most inspiring sight I have seen in forty years of football."

Mr. Miller left Harvard in 1866 to take charge of his grandfather's farm at Peterboro, where he still lives. In 1869 he imported the first blooded Holstein cattle ever brought from Holland, and the first calf, Agoo, dropped on his farm the next spring leads the more than 2,000,000 registrations on the American-Canadian Holstein Herd Book. Every Holstein cow that has produced 1000 pounds or more of butter in a year traces back at least twice to his pioneer Kriemhild herd, and the Holstein-Friesian, unknown here in 1869, now gives more than three-quarters of our total milk production.

The others of the surviving seven are Edward L. Arnold, Edward Bowditch, Dr. Francis G. Peabody, J. D'W. Lovett and Dr. Robert Lawrence.

CHAPTER II

FOOTBALL COMES TO COLLEGE

IT is not easy to conceive of a United States in which there were no sport pages in the newspapers and virtually no organized sport, amateur or professional, yet there are men alive who can remember it. I am too young to recall the mustering out of the Grand Army of the Republic and the effect five years of civil war left on American life, but I surmise that it was at least as profound as that which followed the recent war. Certainly a great boom in sport in all its branches followed soon after Appomattox, and likewise after the World War, and I have no doubt whatever that the impetus came from the discipline, the active open-air life, the emotional tension, and the altered standards and values of life that followed such an experience.

Professional sport before the war had been little more than sporadic horse racing, clandestine bare-knuckle prize fights and foot racing.

Recorded competitive amateur sport dates from a cricket match in 1838 at Thirtieth Street and Broadway, New York City, between a local and

a Philadelphia club. Cricket throve most in Philadelphia, which was represented by four clubs, the Union, the Philadelphia, Young America and Germantown in the middle 50's. Recorded baseball begins with a match game in Hoboken on June 19, 1846. By 1857 delegates from sixteen amateur baseball clubs had met in New York to agree on rules. Two years later these clubs formed the National Association of Baseball Players.

Yale and Harvard boat clubs first raced on Lake Winnepesaukee, New Hampshire, in 1852; next in 1855, on the Connecticut River at Springfield, Massachusetts, six men in a long shell, a mile and a half downstream, turn a stake and back to the starting line. The first actual intercollegiate regatta was not rowed until 1859 on Lake Quinsigamond, Worcester, Massachusetts.

Track athletics came after the war. The first intercollegiate meet was the New York Herald's Olympian games at Saratoga in 1874. Out of this enterprise grew the first annual field meet of the Intercollegiate American Amateur Athletic Association, held at Glen Mitchell, near Saratoga, in 1876.

Professional gambling early showed its ugly head in collegiate sports. Pools were sold at the Springfield regatta, in 1872, at which Amherst set a record in sixes.

Parimutuel betting machines were thought new

when they were introduced into American horse racing in recent years, but mutuel tickets were sold at the Turf Exchange, New York City, in 1876, on the intercollegiate regatta on Lake Saratoga, a part of the first I. C. A. A. A. meet, the winning five-dollar tickets on Cornell paying $10.81 on the varsity race, $8.48 on the single sculls, and $11.42 on the freshman race. George Huff, Illinois' great athletic director, first led the fight in the Western Conference in the football season of 1921 to do away with betting on the games at Urbana. His success caused the Big Ten directors to agree on united action against the evil, with splendid results.

Prep-school boys must have carried football as an ordered game and the tradition of interschool play up to colleges long before, but the first intercollegiate football match was not played until November 6, 1869, at New Brunswick, New Jersey. Incidentally that was three years earlier than the first intercollegiate football game in England, played in 1872 between Oxford and Cambridge. Rutgers and Princeton were the combatants and the game took place on the Common between College Avenue and Sicard Street. It was followed a week later by a return match at Princeton. The third game on the records was a Columbia-Rutgers match at New Brunswick the following year. Yale played its first intercollegiate game in 1872 with Columbia, at New Haven, and Harvard its first in

1874 with McGill, at Cambridge. Pennsylvania edged into the picture first on November 11, 1876, meeting Princeton at Germantown.

This Princeton-Rutgers pioneer game was a continuation of a historic annual fight between the schools for the possession of a Revolutionary cannon for which Washington and Lord Howe had contended originally. Princeton having ended the war by anchoring the gun in a bed of cement on the Nassau Campus, a football was substituted.

The only account I know of the game is to be found in the files of the Rutgers Targum, and is worth quoting for its own sake. "On Saturday Princeton sent 25 picked men to play our 25 a matched game of football," the Targum reported. Parenthetically, it is odd that the colleges should have played twenty-five men, when the Boston prep schools were using only fifteen ten years earlier, a number to which the colleges did not reduce until 1876. The larger number was the original English Association practice.

"The strangers came up at ten o'clock," the Targum continued, "and brought a good number of backers with them. After a dinner and a stroll around town, during which stroll billiards received a good deal of attention, the crowds began to assemble at the ball ground. Previous to calling the game the grounds presented an animated appearance. Grim-looking players were silently stripping,

each one surrounded by sympathizing friends, while around each captain was a little crowd, intent upon giving advice and saying as much as possible.

"The Princeton captain, for some reason or other, gave up every point to our men. The only material points were that Princeton give up free kicks, whereby a player when he catches the ball in the air is allowed to kick it without hindrance. On the other hand, our practice of babying"—dribbling—"the ball on the start was discarded and the ball was mounted, in every instance, by a vigorous long kick.

"Princeton won the toss and chose the first mount, rather oddly, since it had been agreed to start the ball against the wind. The Princetonians suffered from making a very bad mount, or buck, as they call it, the effects of which were not remedied before the sides closed, and after a brief struggle Rutgers drove it home and won amid great applause from the crowd."

Rutgers won 6 goals to 4, but when they came to Princeton the following Saturday it was discovered that the Targum had understated the material points at issue about the rules. Princeton now played its own rules and walloped the visitors 8 goals to 0, and the Targum reported later: "The style of play differs materially in the two colleges. A fly, or first bound, catch entitles to a free kick

at Princeton. We bat with hands, feet, head, sideways, backward, any way to get the ball along. We must say that we think our style much more exciting and more as football should be.

"Their cheer, sounding as if they meant to explode but for the fortunate escape of air, followed by a grateful yell at deliverance from such a catastrophe, still sounds in our ears. If we must be beaten we are glad to have such conquerors."

Here was the same anarchy of rules that had confused English football so hopelessly until 1864. The first intercollegiate baseball game had been played July 1, 1859, between Williams and Amherst, but earlier in that year the National Association of Baseball Players had organized at Cooper Union and adopted a playing code that governed college games as well. Collegiate boat racing was pure aping of the Oxford-Cambridge regatta and had the Henley and Putney rules as a pattern. In football, on the other hand, England offered two codes, each only lately agreed upon.

In 1871 David Schley Schaff entered Yale from Rugby and promoted a football game between his class, '73, and '74 on the New Haven Green. The city had barred students from playing on the Green in 1860, and attempted to stop this contest, but the faculty championed the students' rights and the police withdrew. This led up to the organization of the Yale Football Association in November,

1872, with Schaff as president and captain. The first game scheduled was with Columbia on November sixteenth at Hamilton Park, Yale winning. Although Schaff came from Rugby, the game was governed by modified Association rules and, more curiously, the Yale code expressly forbade carrying the ball.

Meanwhile Harvard had developed another set of rules. It was not Rugby, but a player was allowed to carry the ball when pursued, and the game was so different in other essentials that Harvard courteously declined to attend a rules conference at the Fifth Avenue Hotel in October, 1873, arguing that there was no basis for agreement. Yale, Rutgers and Princeton did attend, however, and compromised on twenty men to a side instead of twenty-five, no carrying or throwing of the ball, free kicks on fair catches and no babying, or dribbling, on the kick-off.

This was the first rules conference in the United States and these the first agreed rules. Three games only were played under them. Yale defeated Columbia and lost to Princeton, and Rutgers beat Columbia, all in the fall of 1873. In this same autumn a team of Etonians played at Yale under mixed rules, and brought with them their Etonian practice of eleven men to a side. Thereafter Yale held out annually for eleven men and won its point finally in 1880.

The Princeton victory over Yale in their first meeting was an upset. Yale played a bucking, rushing game, developed years later into interference. Princeton's habit was to follow the ball at all hazards, even to the neglect of their opponents' play. Sixteen of the twenty pursued the ball everywhere, leaving two to guard the home goal and two stationed at the enemy goal to help the ball through if it came their way. The Boston schoolboys of ten years earlier had no goal posts, but they were in use by now and similar to the present soccer goal. Then a goal was scored not by kicking the ball over the crossbar but by kicking it under the bar and between the posts.

Yale's startling tactics badly confused the visitors, but for once Providence was on the side of the weaker battalion. Yale had scored a goal almost from the kick-off and was on its way to another when a Yale and a Princeton man kicked the ball violently at the same instant from opposite sides and the rubber globe collapsed with a protesting pop.

A messenger had to be dispatched downtown for another ball, and half an hour elapsed before he found one and returned. Meanwhile Princeton put its collective heads together and decided to fight the devil with fire; otherwise, to adopt Yale's eccentric style of play. Imitations have the reputation of being inferior always to the originals. The

very imperfection of its imitation won for Princeton, however. In adopting Yale's own style of play, the visitors still left their two skirmishers stationed at the Yale goal posts. The game ended in a 3-goals-to-1 victory, all three of the Princeton goals being pushed through by these two sharpshooters, whom Yale had failed to cover.

Dr. J. E. Raycroft, now heading the Department of Physical Education at Princeton, formerly a member of my department, tells the sequel of the "busted" ball.

"A Yale spectator picked up the discarded ball and kept it until 1925 when he was convinced by a Princeton man that it did not belong to a Yale man since they lost the game. So now it is in Princeton. This is probably the oldest authentic trophy of an intercollegiate football game."

The intervention of the Yale faculty in 1871 in behalf of the students when the city barred them from the Green was one of very few early instances of faculty friendship toward athletics. The Yale and Princeton faculties both had peremptorily refused the teams permission to leave classes long enough to play a match in New Haven or Princeton in 1872, though Princeton finally was allowed to meet its near-by neighbor, Rutgers, and Yale to play Columbia. In general, athletics developed in the American college in spite of either the hostility or the indifference of the teaching body, and out

of that attitude grew the at one time critically serious evils of student and alumni control of football and other college sports.

We are down to 1874 and still no Rugby football in the United States. When it arrived that year it came by way of Canada, where a modification, under the All-Canada rules, already had displaced Association in the colleges. Early in 1874 McGill University sent a challenge to Harvard for two games, one at Cambridge under the All-Canada code, the other at Montreal under the Harvard rules. The Harvard faculty refused to permit the team to travel so far, so McGill consented to play both contests at Cambridge.

Harvard took the first under its own style of play. When the second game was called the following day, McGill was discovered to have failed to bring along one of the peculiar melon-shaped balls used in Rugby, thinking to get one in Boston, but neither there nor anywhere in the United States had a Rugby ball ever been seen. Handicapped by having to play with a round rubber ball, McGill could not do better than tie Harvard. It is not of record how the Rugby ball acquired its conformation, but the fact that an inflated pig bladder approximates the same ovoid shape is significant.

The first Rugby game in the United States, then, was played at Cambridge on May 15, 1874, and with a rubber ball. McGill went home leaving the

entire Harvard student body converted to the new game. "The Rugby game is in much better favor than the somewhat sleepy game now being played by our men," a Harvard paper commented.

The next season Harvard went over to Rugby unanimously and challenged Yale to a game that was to become the first of a great procession. Yale accepted only on condition of a rules compromise, resulting in a hodgepodge of the new and the old, under which Harvard won. The compromise was called the Concessionary Rules.

It had been hoped that a new and American game would spring from the union, but the two were so different in principle that both were spoiled. Princeton watched the experiment with keen interest, and a quarrel followed that had the Nassau student body at one another's throats.

After the game a Princeton paper said: "We are decidedly inclined to prefer the rules of 1873, as not only fairer to both parties but also as less rowdyish and much more scientific than those of Harvard. We fail to see the sport in being mauled disgracefully in such unmanly scrimmages as are necessary attendants upon such rough games, and there is but little science or skill in the playing which characterizes Harvard's games.

"What would be thought of the catcher of a baseball nine striking out in hot haste to catch, hold or maul a player running to first, and using

every means to prevent that player reaching the base until the ball has preceded him there? Football is fully as capable as baseball of skillful and scientific playing, and we confess ourselves utterly unable to account for the taste which prefers Harvard's rough-and-tumble scrimmages to the incomparably more genteel game as played under the rules of 1873."

Association unquestionably was the more genteel game, which, no doubt, is the reason it lost out among American college students.

The Princeton paper expressed the view of the conservatives. Theirs was not only the more genteel game, they argued, but had they not whipped Yale at it? Why change? The radicals foresaw Princeton playing all by itself if it clung to Association, however, and carried the day for Rugby in a stormy meeting of the student body. The sense of the meeting was that invitations to a conference on rules be sent to Yale, Harvard and Columbia.

The delegates met at the Massasoit House in Springfield, Massachusetts, on November 26, 1876, just as the Centennial Exposition was closing at Philadelphia, and again they compromised. Yale, backed by Columbia, held out for eleven men to a side, and a method of scoring by which only goals counted. Harvard and Princeton argued for touchdowns and fifteen men. The result finally was an

agreement on fifteen players and the score to be decided by touchdowns—but one goal was to equal four touchdowns, and in case of tie a goal kicked from touchdown should take precedence over four touchdowns. The English Rugby rules were amended to punish fouls more stringently, and officials were provided for for the first time.

Until now the two captains had been arbiters of all disputed points, an obviously unsatisfactory system. At this meeting someone had the happy inspiration of appointing a judge of play for each team with a neutral referee to decide between the judges. These judges, of course, soon evolved into advocates, special pleaders, football lawyers, who made impassioned speeches on the field and all but swore out writs of mandamus and habeas corpus. They made such confounded nuisances in their office that they were thrown into the discard in 1885.

The Yale student body resented the fifteen-men rule in particular, and declined to enter the conference. They already had beaten Harvard under full Rugby rules, except that the teams were limited to eleven men and touchdowns were not counted, and they were eager to get at Princeton to avenge the licking of 1875, but not so eager as to waive their objections to the conference rules. Princeton finally agreed to the same terms as governed the Harvard game.

The New Jersey school had played Association all season, switching to Rugby for the Yale game. In a match with Pennsylvania at Germantown on November eleventh, 1876, according to Parke Davis in his Football, published in 1911—one of the very few histories of the game—football uniforms had been worn for the first time on this side of the water.

Penn appeared in white flannel cricket suits. Until much later, cricket and rowing overshadowed football at Philadelphia, Penn crowding onto the football map for the first time in 1884 by defeating Harvard 4 to 0 at Cambridge.

Princeton came on the field at Germantown wearing black knee pants, black stockings, black shoes and black shirts with orange trimming around the wrists and neck, and an orange P on the chest. The colors were those of the House of Nassau, which gave its name to the first Princeton college building.

On Thanksgiving Day, 1876, on St. George's Cricket Grounds at Hoboken, New Jersey, Princeton met Yale for the first time at Rugby and lost 0 goals to 2. Yale thereby won the first intercollegiate championship, and the Yale-Princeton game became the turkey-day football classic of New York City for twenty years, excepting only 1885 and 1886, long eclipsing the Harvard-Yale game. This season there had appeared at halfback on the

Yale eleven a young freshman who was destined to become the dean of American football, the late Walter Camp. Camp figured in Yale's first score. Getting the ball out of scrimmage early in the first half, Camp made a long run, and just as he was tackled, passed the ball to O. D. Thompson, who continued for a touchdown. Princeton protested that the pass had been forward and therefore illegal. The judges, E. W. Price, Columbia, and G. T. Elliott, Yale '77, argued the point to no better result than that the referee toss a coin. G. V. Bushnell, Yale '74, tossed the coin. Yale called heads. Heads it was, and the touchdown was allowed. Touchdowns, by Yale's own stipulation, did not count, but W. I. Bigelow kicked goal. Yale's second goal was kicked by Thompson from the field in the second half.

By Harvard's courtesy the Harvard-Princeton game of '76 was postponed until late April, 1877, to permit Princeton more practice at Rugby. Harvard won, 2 touchdowns and 1 goal to 1 touchdown. The game is a milepost in football history because it marked the first appearance on any field of a costume adapted to the needs of the Rugby game. Again Princeton was the inventor.

In March, 1877, L. P. Smock, Princeton '79, had devised a laced jacket of stout canvas with which the team now was equipped for the first time. All Princeton's rivals had adopted it by the

YALE CHAMPION FOOT BALL TEAM OF 1876

The first to play with leather oval ball and eleven men on a side

YALE 1—HARVARD 0 NEW HAVEN, NOVEMBER 18

YALE 2—PRINCETON 0 NEW YORK, THANKSGIVING DAY

YALE 3—COLUMBIA 0 NEW YORK, DECEMBER 9

Left to Right. Standing: George H. Clark, '80; Charles C. Camp, '77; Walter C. Camp, '80; William D. Hatch, '79; Rudolph Wurtz, '78; William H. Taylor, '78. *Sitting:* William V. Downer, '78; Nathaniel U. Walker, '77; Eugene V. Baker, '77; Captain, Walter I. Bigelow, '77; Oliver D. Thompson, '79. *In Front:* Edward L. Morse, '78; (sub); Frederick W. Davis, '77 (sub).

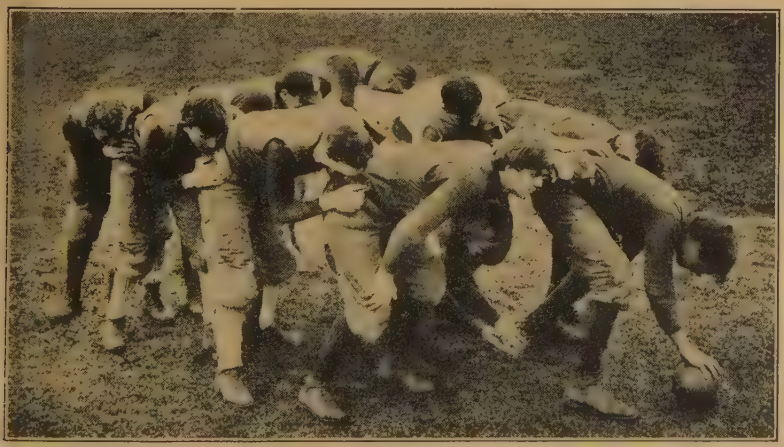


Photo. Culver Service

THE PREDECESSOR OF THE KICK-OFF—THE WEDGE

following fall, for it was tough, fitted the body so closely and was so stiff and smooth in fabric that it gave no handhold for tackling. In that day of high tackling—anything below the waist being a foul—a jersey was ripped off someone's back every moment or two. Smock's canvas jacket soon necessitated better tackling, and in time led to the tackling line being dropped from above the waist to the hips, and finally to the knees.

The name would suggest that the familiar studio blouse, the uniform of Greenwich Village, is an evolution of the Princeton jacket, but the dictionaries do not support the theory. Instead, the smocks seem to have got their family name from the old Saxon shift, so known.

Over this laced canvas jacket Princeton wore jerseys of horizontal orange-and-black stripes as they came on the field for this game, to win at once the name of Tigers. So far as I know, Princeton was the first school to acquire a nickname. Yale was Yale, or the Blue, when I was at New Haven, and I do not know how or when it became the Bulldog; but in my scrapbooks I have stumbled on a possible clue. On the Harvard game in 1891 a Boston paper reported: "The hit of the afternoon was made by Handsome Dan of New Haven, Andy Grave's corpulent and stub-nosed bulldog. He appeared on the field half hidden by a blue blanket, and mounting a settee, spurred on the western

throng to deafening cheers. Dan is a mascot, but his face aches." Lee McClung, Heffelfinger and their mates did Harvard up 10 to 0, but the bulldog mascot may have been given the credit.

Yale remained outside the Harvard-Columbia-Princeton League in 1877, still stubbornly insistent on eleven men and a straight goal score. Harvard declined to play on these terms, but Princeton met Yale again at Hoboken on the curious conditions of fourteen men and touchdowns not counted. Harvard agreed to the no-touchdown clause in 1878, but Princeton refused that year, and Yale knuckled down. This game and that of 1879 also were played at Hoboken, the 1878 contest in a driving rain. The Princetonian spoke of fully 2000 braving the inclement weather, and protested indignantly against the Football Association's payment of $300 for the "few wretchedly tended square feet of Jersey mud for two short hours."

Rugby football had arrived on both feet on American soil, and the following year, 1880, it began to lose its English accent and to take out first papers.

CHAPTER III

OUR ANCESTOR, RUGBY

I SET out to be a minister and became an athletic director and coach. I won my first fame and excelled most at baseball, yet my name is linked with football chiefly, and my record of pitching Yale to five baseball championships is forgotten. These have been the two great detours of my life.

I was born on August 16, 1862, the fifth of eight children, in a cottage at 384 Valley Road, West Orange, New Jersey, in which three of my sisters still live.

His mother having died in his childhood, my father had been bound out at seven as an apprentice to a shoemaker. He ran away at sixteen. At twenty he had taught himself to read and write. He supported his large family by cobbling, and by general labor when his shoemaker's bench was idle.

My forebears on both sides fought in the War of the Revolution. My father, though poor, was superbly honest and just, and as fearless as was his ancestor, Micah Tompkins, of Milford, Connecti-

cut, who at the risk of his neck, for many weary months harbored in his cellar the regicide judges, Whalley and Goffe, who had been forced to flee from England after passing the death sentence on Charles I.

The books of Horatio Alger were the pattern of success fifty years and more ago, and there is something of Alger in my story. His heroes always were born poor, as any hero should be, and arrived at their goal by the practice of three virtues—work, courage and honesty. I read few of the Alger books, but I subscribe to his creed; and if I have been lazy or cowardly or dishonest, the blame is not my father's or my mother's. The ideals which I have and which I have practiced within my limitations, I learned early and at home, when and where ideals should be learned.

Our neighbors, native and Irish in the main, were as poor as we. They were hat-factory workers, petty craftsmen and laborers. The hat makers were well paid when they worked, but their work was irregular, and whatever they made beyond a bare living they spent at the corner saloons.

These saloons were our substitutes for the movies, the theater, the motor car, the radio, the seashore, reading and all. In bad luck, men drowned their sorrows at the bar; in good luck, they celebrated it there. When too warm, they drank; when too cold, they drank. In high spirits, they let off

steam at the saloon; when bored, they bought high spirits from the bartender.

If we had no movies, we did not miss them. We got our drama at first hand and in the raw from the saloon, and the show was continuous. It must need a lively sense of humor to argue that beer is not intoxicating. Beer was the drink of our street, drunk in the hope and expectation of getting drunk, and rarely disappointed. Carrying pails of beer from the saloon was as routine a chore for most of the boys I knew as carrying in coal or cordwood. When it flowed freely, the family wash was aired on the front fence, so to speak. The woman in the next house but one to ours got drunk on a schedule of about every third day. In her cups, she scorned any antagonist of her own sex. Her husband had learned discretion, but the man who lived across the street would fight with her hand to hand in the middle of the dirt street. My father, though not a teetotaler, was very much an exception. Eight or ten times a summer he would bring home a pint or quart of beer in a pitcher. He was the only member of the family who drank it, and he never sent his children to the saloon for it.

I went to district school. I swam and skated on a pond where the Edison plant now stands. I played first-hand base and third-hand base, and was the treasurer of the gang when we saved our scant pennies laboriously to buy a league baseball. We

were six months in raising the $1.25. When professional baseball came to Orange in 1876, we watched through knot holes. Our back yard was entirely taken up with a vegetable garden, but my cousin next door had a back yard in which we could practice trying to curve a baseball, a discovery then new to the game.

One day I stumbled upon the out, easiest of curves, and I remember running excitedly to the kitchen to tell my mother, yelling, "Mamma! Mamma! I've got it!"

By inheritance I had a stocky, sturdy body, and work and play developed it. Every summer my father hired out for harvesting grain, and for cutting hay on the salt meadows of Newark Bay, and for eight years I worked alongside him. Grain still was cut and cradled by hand and I learned the art of laying a straight swath with the cradle. The Jersey mosquito is no fiction. They bred by billions in those salt meadows, nine miles long and three miles wide, and stung our half-naked bodies maddeningly, until the poison eventually operated as an antitoxin. The cut hay had to be raised above tidewater. When it got wet in the cocks, we would run long, smooth black walnut poles beneath the cock and carry the heavy wet hay to piling. There was no letting go of the poles to swipe at the mosquitoes. Working in water, we cut holes in our shoes to permit it to come and go. Many men

found the work too much for them, but I was young and tough. What my brother and I earned on these jobs went into the family purse; but when my father did not need me, I did odd jobs on my own.

One of the first sporting events I ever saw was a wrestling match between Muldoon and some unknown at catch-as-catch-can at the Orange Ball Park. I was vastly impressed with the bulging muscles of the wrestlers and began carrying scuttles of coal at arm's length. At thirteen, in my ancient history I read of the youths of Sparta, in particular of the boy who hid a fox in his shirt and never batted an eye when the animal bit into his vitals. Coffee for me had been a luxury reserved for Sunday breakfast. At once I abjured it and I have not drunk it since. To develop my wind I ran to and from school, until I would rather run than walk. There was no Y. M. C. A. in the Oranges, nor could I have paid the fee if there had been.

Normally, I should have had to be satisfied, and well satisfied, with a grade-school education. Many of the boys I played with stopped at the third or fourth grade. A high-school education was a distinction, graduating the possessor into the envied white-collar, or, as I knew it, celluloid-collar class. As for colleges, I doubt that I ever had heard of one. As I grew old enough to realize the handicaps my father had suffered from lack of learning, I

aspired to high school, but my ambition went no further. My father was sympathetic, but there was no money. West Orange had no high school; and Orange, upon which our back yard backed, exacted a tuition fee from nonresidents. And I was eighteen, time and past for doing a man's job, when I finished district school.

I worked my way through Orange High School in three years by tending furnaces, lawns and gardens, cutting wood, beating carpets and other boys' jobs when my father did not need me. The school had a baseball team and in my first year I became its pitcher by virtue of my small stock of curves. In the summer I helped to organize an amateur team, pitched when I could sandwich a game in between jobs, and began to earn a local reputation.

It was the assistant principal of the high school, Alton Sherman, a Yale man of ex-president Taft's class, who first suggested college to me. When I objected that I had no money he told me of several of his college mates who had worked their way. The suggestion fell on fertile soil, for I was restless with an ambition I saw no way of realizing. When nearly seventeen I joined the First Presbyterian Church of Orange.

At church functions and later in high school I came to know Grace Livingston, a devout earnest girl who won a reputation in later years as a writer under the name of Grace Livingston Hill Lutz.

She urged on a half-formed aspiration I had for the ministry, and properly to fit myself I should go to college.

When I came to investigate I found that I could not pass the Yale entrance examinations. A classmate, George Gill, son of the mayor of Orange, went to Phillips-Exeter Academy in the fall of 1883 to make up a like deficiency, while I went to work at odd jobs. Gill wrote back urging me to come to Phillips-Exeter, and telling me of scholarships. When he came home for the Christmas holidays he was so persuasive that I decided to return with him.

Although I lived within sixteen miles of New York, I was that many years old before I first saw the city, and I never had slept away from home. My mother was a brood hen to her children and she wept at every meal from the day I decided to go back with Gill until I went. My father's backing, however, kept my spine erect.

Gill gave me one of his suits. It cost my stubborn pride a wrench to take it. Anyway, I would accept no more favors and I leaned backward in that determination. When I came to say good-bye to Doctor Storrs, my minister, I saw that something was hidden in the hand he offered. I suspected, and rightly, that it was a bill, and I shook his other hand.

Out of odd jobs that summer and fall I had saved

twenty-one dollars. That, less railroad fare, was the capital with which I arrived at Phillips-Exeter. Beneath Gill's suit I wore no underwear. I was hardy enough to survive a Jersey winter without underwear, but when I went back to Phillips-Exeter in August three years ago for the first time in forty years, I shivered at the memory of how that New Hampshire winter wind had cut me to ribbons between the railroad station and the school.

Gill asked me to lunch with him at Gorham Hall, his dormitory, and I disgusted him by my refusal. An inferiority complex, it is called now, I believe. Instead I made my luncheon and supper on one pound of soda crackers that cost me five cents. Similarly that was my diet for my first two meals at Yale. Later I found that stale bread went further and tasted as well. That and milk at three cents a quart was the food on which I boned on Latin, Greek and mathematics for three months. It is good diet for ambition. My room was a garret. I might add, for effect, that it was unheated, but I should be cheating. There was nothing to gasp about in 1884 over an unheated room; we broke the ice in the water pitcher of mornings with no sense of hardship. I did not find work to replenish my little capital until the second month. Sweeping out the chapel at fifty cents a week was the first

that offered. Later the German instructor, Professor Faulhaber, gave me my board for doing the chores at his home. Meanwhile, for three months of the bitterest winter I ever spent, my daily rations cost me just sixteen cents. The figures are not from memory but from an old pocket memorandum book in which I kept my accounts.

A man does well to lay aside his modesty, real or pretended, when he writes of a subject as closely related to himself as football is to me. I am coaching my thirty-eighth football squad this fall, and I have known the game for more than forty years. Necessarily, I shall have to limit my story largely to my own experience, in the East before 1892, in the Middle West thereafter; and necessarily these articles, when finished, will, in a measure, be an autobiography.

In the first two chapters I carried football up to 1880. In this I have put the game aside to talk about myself for several pages, bringing my own story forward to 1884. I have to go back four years now and bring the game and myself together.

We still call it football, though everything but the name and the ball have changed. Originally it was *foot*ball, literally and narrowly, but it long since ceased to be. Touchdown might be a better name for it today; even armball would be more accurate, for we carry the ball much more than

we kick it. The dimensions of the field, the time of playing, the number of players, the method of scoring, the uniforms of the players, the umpiring and all other details have changed with the fundamentals of the play.

To appreciate how it has changed it is necessary to know what it changed from. Rugby became the intercollegiate game in 1876. Despite its revolutionary carrying of the ball, Rugby was football. The ball was kicked frequently by the forwards, more frequently by the halfbacks, and always by the backs. It was kicked high with the wind, low against; out of bounds to put the opposition in a hole or if stalling for time; by drop kick or from placement for goal from any point short of center field. Booting the ball over the goal was the primary object of the game, and tries were constant even at great distances. There was a whirling punt, called a tumbler, too, so kicked as to drop suddenly. A change in the wind altered the ball's course and made it hard to judge. Most of the time the ball was kicked from the ground, either while in motion or when dead, and without touching it with the hands.

The eight forwards of the team of fifteen were spread in a straight line equally spaced across the field. Behind them were four halfbacks and three backs at equal intervals, the outside men almost on the side lines. The players were uniformed in

stockings, knee pants, jerseys and cap—at one period stocking caps with Zouave tassels—and they wore no padding or guards. The oval Rugby ball rested at an angle of forty-five degrees in the center of the field as the game began. The opposing forwards lined up fifteen yards in front of it, the offensive team a yard behind. The field was 140 yards by 70 yards, and unmarked except upon its exterior boundaries.

The ball was kicked off by drop kick, place kick, punt, dribble or fake, and there was no shrill whistle from the referee to bring the stands to their feet, nor stands to be brought to their feet. The few spectators stood along the side and goal lines. When the chosen kicker-off had measured his distance the referee shouted, "All ready? Play!" The kicker-off might kick for distance or he might, and often did, only touch the ball with his foot to put it into play, then scoop it up in his arms and run with it, tossing it to one of his own men just as the enemy closed in on him; and the second man tossed it to a third often, and on until the ball carrier was spilled by a tackle. Originally the runner had thrown the ball blindly over his shoulder as he was tackled, but order and method soon appearing, the passing became the prettiest spectacle of the game.

The ball being down, it now went into scrummage, as the English called it, somehow early

changed to scrimmage here. We still use the term, but it means something very different. The original scrummage was a weird and unscientific institution. The ball belonged to neither side. Instead, the referee placed it upon the ground and the opposing lines of forwards, eight each, closed around it in a tightly wedged mass. The ball could not be touched with the hands and there were only three alternatives. The first tactics was to push straight ahead, with the object of forcing the opposing line back and the ball with them. The second was to wheel to one side suddenly, throw the enemy off balance and take advantage of the opening. The third was to heel the imprisoned ball back out of its narrow cell to one's own backs, who could run with it.

This was distinctly bad form and regarded as begging the issue. It was done only when the forwards were badly blown and in need of a rest, and the English called it shirking.

It may have been interesting to the forwards, but it was dull business for the backs and the onlookers. For long periods the ball could not be seen and nothing happened. All the spectators could distinguish was a ton and a half of heavyweights leaning pantingly against one another. Eventually the ball would pop out by accident or surrender, a back would seize it for a run, be tackled and downed, and back went the ball into scrummage.

This pushing, puffing and panting was mani-

festly senseless, for a novice could perceive that it was a distinct advantage, whether sporting or not, to kick the ball back to one's own back field, or craftily to leave a hole in one's own line through which to decoy the ball. And realizing this, American collegians immediately acted upon it, thereby making the scrummage more ridiculous than ever.

Here was the first great break with the English game, and here the fundamental difference in point of view between an American and an Englishman which explains the whole evolution of our football from Rugby.

The British play a game for the game's sake; we play to win. That doctrine has been carried to outrageous lengths at times and all but killed football; but within bounds, it was the making of the game. I hate a man, a team, a school or a people who cheat. I should prefer to lose every game rather than win one unfairly; but there is a finer distinction than this between the British and the Yankee points of view.

Charley Daly, who went to West Point after four years on the Harvard team, made the army eleven and later was its coach, once described football as "a game of war within the limitations of the rules and of sportsmanship. Either by force or deception, it advances through the opposition to the goal line, which might be considered the capital of the enemy."

He stated one of the two basic contrasts in our national ways of looking at things. Deception never quite has been considered cricket by the British sportsman. With us it is the heart of the game. By means of it the under dog may topple the top dog, brains may defeat brawn. It provides the unexpected, the surprise *dénouement* that we like in all our drama. Contests that are decided purely by superior force are apt to be dispiriting.

Nor could we see rime or reason in such a play as the English scrummage, where success in the initial objective usually presented the advantage to the opposition. George Fitch reduced this philosophy to its ultimate absurdity in one of his Siwash stories in *The Saturday Evening Post* long ago, wherein Gaston Siwash implored dear Alphonse Mugglesdorfer to take the ball, and Alphonse begged dear Gaston not to think of it.

The second contrast lies in the respective national attitudes toward the rules. The British, in general, regard both the letter and the spirit. We, in general, regard the letter only. Our prevailing viewpoint might be expressed something like this: Here are rules made and provided for. They affect each side alike. If we are smart enough to detect a joker or a loophole first, then we are entitled not only in law but in ethics to take advantage of it. Those words "with a fine disregard of the rules," cast in the tablet set in the brick wall at Rugby,

make a very un-English phrase. They would feel more at home, I suspect, over the gate of one of our college stadiums.

Out of this philosophy came the first important change in the rules, the abolition of the scrummage, and the bulk of the endless succeeding changes. The story of American football might be dramatized in two ways. It has been a continuous effort, first to beat the rules, thereby forcing a constant readjustment to equalize the disturbed balance between the offence and the defence. Secondly, it has been a tale of the rise from obscurity of the sterling young hero, John J. Touchdown, and the coincident fall of the great Lord Goal. The touchdown was so lowly in 1876 that it took four of him to equal one goal, with the added stipulation that in the event of a tie, a goal from touchdown outweighed not only the touchdown itself but three others of its kind. In other words, the touchdown's only real value was the opportunity it presented of a free try at goal—a try, by the way, which could be made from as close to the goal posts as the kicker liked.

When a numerical value first was assigned after the season of 1883, a goal from the field counted 5, a goal from touchdown 4, and the touchdown itself only 2. The following year the touchdown doubled in value to 4, went to 5 in 1898 and finally to 6 in 1912. Meanwhile the goal from field fell from 5 to 4 in 1904, then to 3 in 1909, and the

goal from touchdown from 4 to 2 in 1885, to 1 in 1898. In these changing valuations is the accurate measure of the shifting emphasis of the game from kicking the ball to carrying it.

There is the further fact, of course, that Rugby at home was restrained, like all English life, by a body of traditions as fixed as the laws of the Medes and Persians, as well as by the Rugby Union code. Here it had no traditions, few and relatively simple rules, and virtually no neutral officials capable of interpreting and enforcing them.

CHAPTER IV

FIVE YARDS TO GAIN

THE best evidence of the lack of tradition in American football was the appearance of interference in our game. Interference and the abolition of scrummage were two of the greatest changes in their effect ever made from the Rugby Union code. If there was one distinctive feature of Rugby, it was its rigid prohibition of off-side play. The scrummage was abolished by the Intercollegiate Football Association at its meeting in Springfield, Massachusetts, that convenient halfway point between Harvard and Yale, on October 12, 1880, before the opening of the season. The original off-side rule, on the contrary, remained unchanged in the rule book until 1906, but it was honored only in the breach. That rule read: "Every player . . . is off side if he enters a scrummage from his opponent's side; or, being in a scrummage, gets in front of the ball, or when the ball has been kicked, touched or is being run with by any of his own side behind him, i. e., between himself and the goal line."

Interference, which was a direct and categorical

violation of this rule, grew out of Princeton's use in 1879 of two players to convoy the ball carrier, one on each side, but never in advance. It was introduced in the Harvard game, and Walter Camp, who refereed, warned the Princeton captain that it was illegal. He seems not to have been sure of himself, however, for Yale was using the same play later in the season. This entering wedge having been accepted by common consent, Princeton in 1884 sent its interference boldly ahead of the ball, and again the opposition copied instead of challenging. When I played on the Yale freshman team in 1884 the man with the ball ran individually, but interference was in the process of developing into the keystone of offense, as it soon became and has remained.

When the scrummage went out, the convention provided that one of the forwards, or rush line, to be called the snapperback, was to pass the ball back to a back, to be known as the quarterback, with his foot. Note that word "foot." This was the first step toward giving each position a name. The designations, halfbacks and backs, had come with Rugby from England; but as the English played the game, there was no need to distinguish one forward from another, their duties being alike. The snapperback, of course, was our center. As the defensive rush line was permitted to harass him as he passed the ball, and the men immediately at his

right and left protected him as much as possible, the term "guards" suggested itself. Inevitably the extremities of the line began to be called end men, shortened later to ends. This left the players between the guards and the ends alone unnamed.

Their position was advantageous for tackling, and tackles they became, although neither guards, tackles nor ends were mentioned by name in the rules until thirty years later.

In abolishing the scrummage the rules body did not foresee what a revolutionary move they had made. Princeton discovered a joker at once. The convention had provided for the retention of the ball, but not for its surrender. Followed one of the most comic games on the records, the Princeton-Yale block game of 1880, and the even more absurd block game between the same teams in 1881.

Both had defeated Harvard and the championship was at stake when they met on the Polo Grounds, New York, Thanksgiving Day, 1880. By rule, in case of a tie, the championship went to the winner of the previous season, a precedent which caused much mischief. Princeton had defeated Harvard by one touchdown in 1879, while the other games between the Big Three had ended in ties, so the convention had awarded the 1879 championship to Princeton on its 1878 showing. Now the New Jersey school needed only a tie with Yale to retain the silk banner in 1880.

Safeties counted nothing, and once a side got the ball, there was nothing but a fumble to prevent their keeping it indefinitely. If pressed back upon their own goal line, they had only to touch the ball down behind their goal, bring it out without penalty to the twenty-five-yard line and resume play. The Princeton goal being endangered early in the first half by a long run by Walter Camp, the Tigers at once adopted this block defense. Eleven times in the game Princeton touched the ball down for safety, six times in fifteen minutes while Yale was on top of her goal, and the Tigers retained the ball throughout most of the second half, the game ending 0 to 0 as they had hoped.

The rules convention would put a stop to that sort of nonsense. At its next meeting it penalized the safety touchdown. In case of tie, two extra innings of fifteen minutes each were to be played, and if the score still remained even, the victory should go to the side that had made the fewer safeties. At the same meeting a kicked ball that struck the goal posts or crossbar and bounced over the bar was declared to be a goal. Until then such a kick was a failure.

But Princeton found a new joker in the deck. Both she and Yale had beaten Harvard again when they met at New York in 1881, and a tie would serve the same purpose as in 1880 and 1879. Rugby originally had recognized an imaginary extension

of the goal lines and the side lines, creating a square at each of the four corners of the playing field running on into infinity. These squares were known as in goal, and though they were behind the goal line, they were not of it. The ball passing into one of the squares, it became a touch in goal and Rule 21 of the 1876 code stipulated: "Immediately the ball, whether in the hands of a player or not, goes into touch in goal, it is at once dead and out of the game, and must be brought out as provided by Rules 41 and 42." These rules specified that it be brought out to the twenty-five-yard line, as in the case of a safety, yet a touch in goal plainly was not a safety, and therefore without penalty.

They knew their rules at Princeton. Within four minutes after the kick-off, Camp sent a long high punt toward the Princeton goal. The Yale ends were down on top of the Princeton receiver almost as quickly as the ball descended, and he hurled it quickly to a Princeton halfback who had been stationed purposely in goal. It now was Princeton's right to put the ball into play on the twenty-five-yard line either by carrying it or kicking it, but the Tiger had no intention of kicking it back into Yale's hands. They chose to carry it, thereby retaining it, and retain it they did for the balance of the first half. During that time the ball scarcely moved from the twenty-five-yard line.

In the second half, it now being Yale's ball, the

Blue countered with the same tactics and held it for the entire forty-five minutes, all but the last three minutes being played within a space of ten or fifteen yards. When the second half ended, the referee called for the two extra fifteen-minute periods. Princeton getting the ball from the kick-off resumed its time killing, and before the first of the two extra innings was played time had to be called on account of darkness. A disgusted crowd had hooted and hissed for a while, then settled into a sullen silence. The ball had been kicked only six times in an hour and forty-two minutes of play.

Yale's willingness to play a block game in its own half was explained after the season, when she claimed the title on the same precedent in which Princeton trusted, but with this legalistic distinction: Rugby now was played with eleven men to a side. Princeton's 1878 championship had been won with fifteen men. Manifestly the championship should revert to the team that had won in the last preceding year in which eleven players had composed a team. That year was 1876, when, it will be recalled, Princeton had reduced to eleven temporarily to humor Yale. You have guessed it—Yale won that season.

This controversial game was Walter Camp's last at Yale. He had played six years and been captain three times, in '78, '79, and after the lapse of a year, again in '81. He might have played in '82,

but before that season the convention decreed that no one should be permitted to play in championship games for a longer period than five years, the earliest limitation of the kind in the rules.

Camp was outshone by Eugene Baker until the latter graduated in 1878, but thereafter he was supreme. He and Chummy Eaton, left end, worked in pretty unison always, passing the ball back and forth between them as they ran for long gains. Eaton was injured in the Harvard game of 1879, and Frederic Remington, later the great artist of our frontier, took his place in the Princeton contest. The season of 1880, Eaton's father and mother refused to allow him to play. That year an unknown, "W. L. Adams," appeared at left end for Yale with much éclat. It was Chummy under another name.

The 1881 block game was followed by a great hullabaloo in which the newspapers joined, their first serious notice of the game. The solution first was advanced, according to Parke Davis, in an open letter in a newspaper, signed An Englishman, which was reprinted widely. The writer denounced the block tactics and suggested not only that a touch in goal be counted as a safety but that one side be allowed to keep the ball for four successive scrimmages only.

A special convention, called early in 1882, disagreed; but at the regular fall meeting that year

the Englishman's suggestions were adopted, with this difference: If on three successive downs the team having the ball should not have advanced it at least five yards or lost ten yards, it should forfeit the ball to the other side at the spot where the fourth down was made.

The five-yards-in-three-downs rule was as momentous in its effect as the abolition of the English scrummage and the entry of interference. From this point on American football lost all resemblance to the importation from which it sprang. The immediate result was the appearance in 1883 of rehearsed strategy and the introduction of signals to designate these prearranged plays.

The rule furthermore forced the laying off of the field in five-yard sections in 1882 by chalk lines, giving it the appearance of a gridiron, which term shortly was invented by a reporter unknown to fame and came to designate all football fields.

Football might have wound up on the financial page, somewhere between Galveston spot cotton and the Savannah rosin market, if the rules committee had not come to the rescue in 1883 and given each scoring play a numerical value. It had been bad enough with the game decided by touchdown, one goal equaling four touchdowns, and in case of tie, overriding them. With the appearance of the safety, only a national bank examiner could unscramble the result. A safety was assigned the

value of 1 point, a touchdown 2, a goal from touchdown 4, a goal from field 5. The next year the respective values changed to 2, 4, 2 and 5 and remained unaltered until 1897.

It was this year of '83 that I saw my first game, Princeton versus Yale at Manhattan Field, New York. I had no real expectation as yet of being in college the following year, and no certainty that it would be Yale if I did go, so I attended as a neutral. I knew next to nothing of the game, and though Yale won, 6 to 0, three out of four of the memories that have survived clearly that span of forty-four years are of Princeton. I still had the bulging-muscle complex, and the calves of the Tigers' legs, exaggerated by their orange-and-black striped hose, impressed me much. My other recollections are of the skill and precision with which any Princeton player passed the ball to a team mate when tackled, of the famous ambipedextrous Alex Moffat, and the skillful out passing of Twombly, Yale's quarterback, who, when I was expecting the ball to be passed to halfback Terry for a run, turned quickly and sent the ball half the width of the field to an end rusher, who caught it on the run and went for a long gain down the field before he was stopped by Princeton's fullback.

The previous week at Princeton, in a game with Harvard, Moffat, who was captain of the Princeton '83 squad, had made a football record by kicking

five goals against the Crimson—a goal from touchdown in the first half and four drop kicks in the second. He could kick with equal facility with either foot and he booted two of his field goals with his left. Three of them were from difficult angles. The first was kicked from the forty-six-yard line, the second and third from the forty-yard line, the fourth from the thirty-eight-yard mark. This same Moffat had invented the spiral punt in 1881 and changed thereby the whole science of punting. He was the first of the great gridiron heroes of the Tiger.

Michigan, the West's football pioneer, came East in 1883 and played Harvard, Yale, Wesleyan and Stevens in a row. Michigan's first invasion had been in 1881, when she played Harvard, Yale and Princeton, all within six days, losing all by small margins. I had considered this one of the records of the game never apt to be broken, until H. G. Seibels of Birmingham, Ala., called my attention to the mark set by the Sewanee eleven of 1899, of which he was Captain and Senator Luke Lea was manager. In six successive days away from home in November, 1899, Sewanee defeated Texas, Texas A. & M., Tulane, Louisiana and Mississippi, all without being scored upon. Sewanee played twelve games that year, won all, and was scored on only by Auburn.

Dearth of competition at home forced the

Wolverine to forage afar. Interclass football had been played at Ann Arbor several years before the school was able to drum up its first outside opponent in 1879. The victim was a newly organized eleven from Racine College, and they met on the Chicago lake front in the old White Sox—or, as they said in the 70's, the White Stockings—park, Chicago's first game. The following fall Michigan and the University of Toronto played at Detroit—that city's first game.

College football in the East up to 1884 still was pretty well restricted to the Big Three, Pennsylvania, Columbia, Wesleyan and Stevens Institute; but this season two recruits joined the parade. Richard Harding Davis promoted a team at Lehigh and fired the opening gun in the now historic feud with its neighbor, Lafayette, and Dartmouth invited the Yale '84 eleven to Hanover to demonstrate the game, courteously improvising a team for Yale to demonstrate upon. The score of the demonstration, 113 to 0, made a terrific impression upon my freshman mind, but it was completely satisfactory to Dartmouth. Enthusiastically, the Hanover school took the game to its bosom.

My reputation as a pitcher at Phillips-Exeter had penetrated to Dartmouth. The president of the athletic association wrote me in the summer of 1884 suggesting that I would be certain of a place on the baseball team and adding: "There is no first-class

college in New England where a man can get along on less money. A large number of the fellows pay their own way, receiving, of course, considerable aid in the way of scholarships, and so on."

The recruiting officers already were at work, it will be seen, and not always so unobjectionably, apparently, for in 1881 the intercollegiate convention had agreed to bar players whose college expenses were paid. Dartmouth, however, was not a divinity school. Months before, I had written President Noah Porter, of Yale, and in due time he had answered me personally in his own hand. How executives of that pre-typewriter day were able to keep up with their correspondence still mystifies me. "To good scholars the college has given from the Ellsworth Fund $175 a year," President Porter wrote. "Beyond this the college, as such, can do little or nothing; but opportunities for self-help present themselves and are soon discovered by those who keep their eyes open to discern them."

In June I presented myself at New Haven for the entrance examinations and passed. You may get a picture of the youth I was from an incident in the examination room. A boy sitting alongside me asked me in a whisper the answer to some question. I looked at him in shocked amazement. As a younger boy, in playing raggedy mole, in which we raced around several blocks, other boys cut the

corners when out of sight, but I scrupulously ran the full course always.

A would-be divinity student, twenty-two years old and with thirty-two dollars to his name, I arrived at Yale in September, 1884, and turned out for the squad. The college bought its first athletic field that year, the one hundred and eighty-third of its history. Being situated in the heart of New Haven, it had had to go far out to the farther bank of the West River to find sufficient cheap vacant land. Paying good money for a playground caused talk and revived faculty criticism of the attention being given to athletics. Prof. E. L. Richards, who promoted the present Yale gym, dug into the records on his own initiative, proved that disciplinary cases had decreased sharply and progressively since 1875, and silenced the conservatives.

The old gym was a primitive thing where freshmen were marshaled in street dress and forced to swing Indian clubs and dumbbells. No bath followed and the drill probably did as much harm as good. One of the joys of growing to sophomore stature was escaping the gym. Informal football and baseball practice customarily was held on the gym lot, where Harkness Dormitory now stands. Conditions at Yale were representative of the larger colleges.

There were no coaches, trainers, rubbers, or even

a water boy. Occasional graduated players were drifting back to advise the football team, but the captain still was a captain, not a coach's foreman. He chose the team, ran it, and was not always above playing favorites. Once elected, he was answerable to no one. Walter Camp was in business in New Haven and interested in the team, of course. Once under Camp's captaincy the Yale squad came near dissolving in mid-season over a quarrel between the forwards and the backs. Camp and his fellow backs favored the newer running mass style of play. The rush line was unanimous naturally for the old open, kicking, passing, individual running game in which they could be as spectacular as the backs.

Camp was particularly fearful of a muddy field for the Thanksgiving Day game with Princeton, with Eaton and Fred Remington, heavy ends, and insisted on drilling the line in mass formations. The line revolted. That night Camp summoned the squad to his room in Durfee Hall, told them that the responsibility was his, that he either would run the team or get off, resigned and left the room. Ten minutes of heated debate followed. The rush line was as little convinced as ever, but so disturbed at the threatened loss of Camp's leadership that they coaxed him back. Camp led the eleven against Princeton and won, but Yale played the old open game.

Camp resigned another time. There were no

training rules or training table, but the squad had pledged themselves not to leave the campus for ten days before the Princeton game, and to be in bed by eleven each night. Catching Johnny Moorehead sneaking back from the theater one night late, Camp called every man out of bed and quit on the spot. Moorehead offered his own resignation instead, and Camp reconsidered. As Moorehead played in the Princeton game, he seems to have been restored to grace.

At Princeton as early as 1879 the students had so criticized the football squad for smoking that the players gradually gave up tobacco during the season. In those years at Princeton the team customarily practiced at noon and jog-trotted half a mile to a mile at sundown. A full three-quarters-of-an-hour period of continuous playing against the scrubs was Yale's daily practice, and injuries were disregarded. There was no freshman rule, but no particular attempt was made to interest the incoming class. Two or three dependable substitutes were all that a team thought of needing. The freshman who made the varsity was either a natural player or had played in prep school. The bulk of the newcomers never had seen the game. If they turned out, they were expected to teach themselves.

George W. Woodruff, who later made football history as coach, at the University of Pennsylvania,

turned out the fall of 1885 at Yale, a huge freshman youngster, in a straw hat, running pants and whiskers, to get the hang of this game of football. They put him at guard on the scrubs and trampled him into the soil of Connecticut. The second day Woodruff noted an interesting coincidence. On every third play or so the varsity center, he saw, would nudge the guard opposite Woodruff. That invariably was followed by the guard taking the ball and catapulting through Woodruff's position for long gains. Pondering this, the giant freshman suggested to the scrub center that they try it the first time they got the ball. They did, and to their agreeable surprise, Woodruff burst the varsity line for a smart gain. They tried it a second time and Woodruff went through for a touchdown. Uncertain of what to do next, he lay flat on the ground with the ball beneath him and flatly declined to surrender it to anyone until Captain Peters galloped up, demanded the ball and ordered Woodruff to report on the varsity the next day. He was Yale's right guard for the next four seasons.

The tuition at Yale then was fifty dollars a term. As a future divinity student I was given an abatement of $20.20. I found an unheated garret room for which I paid one dollar a week. Not yet having found work, I allowed myself five cents for breakfast, ten cents for the noon meal and five

cents for supper. It was a starvation diet and I fell ill for the first time in my life. Chills and fever overtook me on my way to class. There was no college hospital and Jesse Lazier, now of Augusta, Ga., led me to his room, put me to bed and called a doctor. The doctor was not long in recognizing a case of undernourishment, and ordered me to drop my nickel-and-dime-meal nonsense.

I was up again in two or three days and shortly after fell into a job of waiting table for my board in a students' dining club. Most of the boys were from distinguished or wealthy families. Gill and Solley, of Orange, were members; probably I owed the job to their friendship. Harry Beecher, quarterback of the '85, '86 and '87 teams and a grandson of Henry Ward Beecher; a grandson of Secretary Seward; a grandson of Chief Justice Waite; Henry L. Stimson, later Secretary of War in Taft's cabinet; and J. O. Heyworth, who directed the Emergency Fleet's wooden-ship construction program during the war, were other members. I found a few chores to do and my older brother and sisters were able to help a bit for the first time.

I did not make the Yale eleven of '84, nor did I play regularly until '88, but malnutrition was not the cause.

CHAPTER V

DIRTY WORK

THE athletic season at Yale began with a student mass meeting addressed by the captains of the crew and the baseball and football squads. I attended with George Gill, my fellow townsman. Gill was disposed to the crew, and where Gill went I was inclined to go. We were on our way down Chapel Street to the boathouse when we met a friend of Gill's, a football partisan, who argued us into turning back to the new Yale field and reporting for football.

Lining up with the scrubs, we encountered almost immediately a farcical left-over from the Rugby Union rules, called the maul in goal. Alex Coxe, 290 pounds and big boned, was at left guard for the varsity. Not content with using his bulk in the line, Captain Richards was employing Alex to lug the ball. Tackling Alex waist-high or higher, as the rules enforced, was a quixotic enterprise, and he dragged us steadily toward our goal line.

Another steam-roller sortie and he went over the line, with Tillinghast of the scrubs hanging on. Coxe landed on his back, and the ball was not down

in that day until it actually touched the ground. If Tillinghast could keep Coxe from turning over, or could wrest the ball from him, there would be no touchdown. This was the maul in goal, legislated out the following year, and the rules stipulated further that it was strictly a private fight between the man with the ball and the man or men who had their hands on him when he crossed the goal. No one else could join in.

What Tillinghast lacked in weight he made up in fight. While twenty of us looked on, the two fought it out for fifteen minutes—and I do not exaggerate. It ended in a victory for the scrubs, Tillinghast getting the ball away from the winded Coxe. The latter was Yale's crack hammer thrower. I see him annually acting as timekeeper at the Penn relay races at Philadelphia.

At rushing time in the fall the freshmen and sophomores played their annual baseball game, which the sophs never had permitted the first-year men to win. I was in the box for the freshmen this year and we won. Already I was much too old a head at pitching to be rattled by sophomoric ragging. I had pitched three years in high school, every summer for the Orange Athletic Club, and for Phillips-Exeter the previous spring. At the prep school a tutor had been the team captain until the rest of us revolted and threw him off.

My performance in the fall game marked me as

baseball material. That and the combined demands of my studies and of earning my way decided me on concentrating on baseball. I turned out for football as often as I could, however, and made the freshman team. The chief stimulus for the freshmen was the chance of whipping the Harvard freshmen, victory carrying with it the privilege of sitting on the Yale fence, sacred normally to the upper classmen. The game with the Harvard freshmen was cancelled this season, whereupon our eleven disintegrated, and we did not attain the fence until the spring, after we had beaten the Harvard first-year baseball nine.

Meanwhile the '88 eleven had played a game with Williston Academy, one with the Wesleyan freshmen, and served doggedly as ten pins for the varsity to bowl over. I began to understand something of what it was all about. Against Williston, my first game, I had essayed tackling Higgins, a young giant, as he was running with the ball. My intentions were better than my technic, and I was sent sprawling by a stiff straight-arm jab to my face.

The next year's freshman class, '89, brushed aside that formality and perched upon the fence in defiance of tradition. We sophomores undertook to pull them off, and I, personally, to take care of George Woodruff, a bull for strength. He twined his legs about the top and second rails, but I pried him loose with a head hold. When electric lights

arrived in New Haven, the city installed an arc on the corner over the fence, violating our privacy by making us visible to any vulgar towner who passed along Chapel Street. We drew up a petition asking its removal, which the city ignored. When we showered it with rocks, a policeman was assigned to guard it. Billy Kent, later a congressman from California, then thrust his .22 rifle out of his dormitory window and shot the light out in the best of California tradition.

P. S. The city moved the light across the street.

In the Yale-Wesleyan game of November sixth I saw Wyllis Terry make football history. Yale won, 46 to 0, but at this moment Wesleyan was on top of the Yale goal line and the ball was passed to Terry behind the line. Instead of making the safety expected by both Wesleyan and Yale, he crossed back over the goal line on the run, dodged and battered his way through the Wesleyan line, made the twenty-five yard line and saved Yale from the safety penalty. This was an unprecedented feat—but he did not stop. Zigzagging across the field, eluding the Wesleyan backs and the pursuing line, he ran the length of the field, converting a safety against Yale into a touchdown for her, the first run from goal line to goal line ever seen in New Haven.

I saw another unusual game on November nineteenth, the varsity playing an eleven composed of

famous former players, most of them Yale graduates, on an icy, snowy field, with a bitter wind cutting across it. The game had changed so radically in the brief time the graduates had been out of school that— But I can't hope to describe it as whimsically as the Yale News did at the time.

"The way in which some of the graduates would at times kick the ball whenever it was loose on the field was a source of much amusement to the spectators, to whom this was an entirely new element," the News reported. "The ball had been in play but a few moments when, getting loose from the crowd, it rolled in the direction of Lamb '81, who, much to the merriment of the spectators, without attempting to lay hands on it, gave it a good solid kick which sent it flying over the heads of Yale's halfbacks and back so that they had to turn and chase it."

I find another interesting example of the changing state of the game, midway between caterpillar and butterfly, in the same paper. A Princeton student wrote to a Harvard student commenting on the Yale-Rutgers game, won by Yale, 76 to 0, and the News reprinted the letter.

"Yale does not put the ball into play right," the letter said, "even in the center of the field; and when the half-backs run, the rushers run ahead and interfere with the tacklers. They ought to have scored only 40 points; but the Rutgers back, a lit-

tle man, was scared to death. When the ball was kicked over the back line, he would walk up to it and pick at it with his hands, drawing it away. As soon as he had touched it Yale dropped on it and made a touchdown."

Speaking of the Harvard-Pennsylvania game, the same letter said: "I do not think that Harvard plays with enough head or roughly enough. This year the player and the ball must be held before it is down and a team will have to throw and jump on top of the men instead of tackling the ball." Inasmuch as Penn beat Harvard this year, for the first time, Princeton walloped the Crimson 34 to 6, and we beat them 48 to 0, there may have been something in the diagnosis.

This 48-0 triumph dedicating the new Yale field was the high point of the season for me. Again I can recapture it best by quoting from the News: "Even at an early hour in the morning it was evident that something noteworthy was about to take place. Strange faces in large numbers were seen on and about the campus and at the boathouse, and everywhere there was present the air of a place where something is going to happen. It was the initiatory game at the new grounds. Surely it was a grand day for the christening. Broad and level, they lay stretched out, smiled upon by one of the most perfect days that ever a lover of the sport could wish for. With no associations of the past,

no grand old victories to be proud of, calling to mind no ringing cheers that had in past years greeted the successful issue of a hard-fought contest, they seemed to lay in waiting for their christening. In the hands of our eleven rested this task, and never was a more glorious christening given to any field. Carriages lined the south side and eastern end of the field, and about two thousand persons were ranged down each side."

Many a high school would blush today for that field. It looked like a village ball park. There was no covered grand stand, but the bleachers seated perhaps 600. Most of us preferred to stand on the sidelines. It so happens that the first of the great concrete stadiums or amphitheaters in the country, of my knowledge, was built for a high school —that of Tacoma, Washington, more than twenty years ago.

The Princeton game being played at the Polo Grounds, New York, I did not see it, and I missed something. Princeton sprang the V play, first of the wedges, on a Yale team that never had seen it until that Thanksgiving Day. Lehigh had invented this trick formation as a kick-off play, and used it on Princeton. The Tigers had adopted it, then adapted it for use on all occasions where a free kick was allowed. The trick was bending the line into a V with the ball carrier inside the point of the wedge, and that point aimed at the enemy, of course. It shortly

became the usual opening play of any game, and by 1889 Yale had adapted it to scrimmage attack. This variation was copied everywhere in 1890.

The V wedge was merely an incident of the battle, at that, and here I ask leave again to print. The Thanksgiving Day game was the only one of the season to be noticed by the New York papers, beyond a paragraph or two. With a pad of paper and a pencil as visible badges of office, anyone might wander as he listed along the lines or inside the ropes. The actual reporters, usually baseball, boxing or racing specialists, knew next to nothing of the game. From season to season this was the only match they attended and they looked upon it as a sort of custard-pie comedy, writing humorously of splints, arnica and ambulances, and gallantly of girls with eyes of Yale blue and others who wore the Harvard crimson in their cheeks. The fact that a Tammany chief was present in a white great-coat was more important than the score.

The fact that few reporters were competent to cover a football game is not surprising; there were so few competent officials that Princeton chose Walter Camp of Yale to referee the Yale game the following year. The game of 1886 at Princeton was delayed nearly two hours by inability to find a neutral referee. T. H. Harris of Princeton finally officiated, but dark came on before the game could be finished. Yale led 4 to 0, but the referee declared

the contest a 0-to-0 draw. Yet after fifty years of football it is disappointing to coaches and players that the game still so rarely is reported with the same skill with which baseball, boxing and other sport-page interests are chronicled. The cause may well be the speed with which football reporters have to work. The afternoon papers must be content with a running account, and the following of detailed play is so breathless a task that it leaves no time for a critical view of the game as a whole. Even with the players numbered, the mere correct reporting of who carried the ball and who stopped it is task enough. The morning newspapers, to which we have a right to look for critical comment, are little better. Games are played almost exclusively on Saturday, and morning papers print bulldog, or early mail, editions of their Sunday issue with as little time margin as the afternoon press.

One New York newspaper, however, sent a man to the 1884 game who, if he knew little of the game and brought away a distorted picture, yet was a good reporter.

"The spectators could see the elevens hurl themselves together and build themselves in kicking, writhing heaps," he wrote. "They had a general vision of threatening attitudes, fists shaken before noses, dartings hither and thither, throttling, wrestling and the pitching of individuals headlong to earth; and all this was an exceedingly animated

picture which drew from them volley after volley of applause. Those inside the lines, the judges, reporters, and so on, were nearer and saw something more. They saw real fighting, savage blows that drew blood, and falls that seemed as if they must crack all the bones and drive the life from those who sustained them."

After De Camp had scored a touchdown for Princeton, "then both elevens relinquished the last of such restraint as may have remained with them," the account runs. "Came a crush about midway of the field. All the maddened giants of both teams were in it, and they lay heaped, choking, kicking, hitting, gouging and howling. One smaller man lay under them. He held the ball hugged to his breast and pressed it to the ground. His chin rested upon it, and his white face looked out from the ruck as the face of a man might look who was on the rack. Gradually the pack separated and the smaller man lay alone.

"He lay for a moment still, except that his face was working in a frightful manner. Then he rolled over upon his back, and one of his legs was drawn up until it almost touched his chin. He tried to clutch the ground and threw his head far back, pressing it into the earth and rolling it from side to side. Some of his companions caught hold of him and raised him to a sitting posture. His lips were drawn wide apart, showing his teeth tightly

clenched. His face was as white as chalk. His hands wandered up and down his body, beating it and tearing at his shirt. Suddenly he tore himself away from those supporting him and rolled over upon his stomach, rubbing his face in the muddy turf as if seeking a soft spot in a pillow. In an instant he was on his back again, clutching at his breast and gasping as though each breath was to be his last. The multitude outside the line wondered what was going on, and uttered wild objurgations and yells at those who blocked their view. Their protests finally took the form of a chorus like those which were chanted in the late campaign: 'Clear the field! Clear the field!' It might have been heard in Harlem."

The Polo Grounds then were at One Hundred and Tenth Street.

"At length four men lifted the injured man and bore him outside of the surrounding small circle. The multitude saw then and the chorus stopped with frightful suddenness. A strange murmur was borne over from the grand stand, where the women were. The players looked like men fresh from real battle. Big Peters of Yale and Adams of Princeton looked like butchers. Their dirty canvas jackets and knickerbockers were streaked and flecked with blood. All were tattered and muddy, and nearly all had bleeding wounds or bruises showing amid

the dirt that was crusted on their heads and faces."

The injured man was Captain Richards of Yale, who had hurt his leg previously at the knee and been advised not to play again that season. Never was injured leg reported so adequately.

"Another man took his place and the game went on," the reporter continued. "De Camp got the ball and got through the Yale barrier, with a Yale man on his back and hanging on like the Old Man of the Sea. The blue legs climbed higher and higher, until finally they shot forth in a spasm and De Camp went down, his head seeming to have been driven into the earth. It was a frightful fall and he lay still. Two of his fellows pumped his arms and slapped his chest. At the end of a minute he stirred, moved, rolled over, sat up and looked around like a man desirous of becoming acquainted with strange surroundings. He stood up, walked to his place and the multitude roared its approval."

This is a very good description of the old high tackle, by the way. Walter Camp used to tell us how Bacon '82 would leap into the air, strike the opposing player in the chest with his knees and cling around his neck.

Bacon was famous as a defensive safety man. He is a professor in the Yale Divinity School and an archæologist of note today. When the tackling line was lowered to the thighs, we despaired of

learning the new method. The piston-rod movement of a pair of powerful thighs, such as Wyllis Terry's, would break the best arm hold.

"Five minutes later a pair of striped legs pitched headlong and failed to get up. It was De Camp again. His left arm hung limp in front of him as he sat. Two minutes later Toler of Princeton slugged Marlin, a Yale sub, grounding him as though he had been shot. The umpire"—he means the referee, R. M. Appleton, Harvard '84—"was called upon to take notice of this. It is pretty sure that Marlin previously had hit Toler in touch, but Toler still was not justified in hitting Marlin."

But the referee, we are told, barred Wanamaker, an innocent party, pointing to Wanamaker's bloody jacket, the value of which evidence was weakened by the fact that everyone's jacket was more or less incarnadined. Princeton, objecting to the decision, demanded a new referee and continued to demand until dark overtook the game before the two requisite forty-five-minute halves could be finished. Yale led 6 to 4, but Appleton declared it a draw under the rules, and the convention upheld him later in a stormy meeting. Much of the lost time had been taken up by the interminable wrangling of the two partisan judges, and the office was abolished before the next season. An umpire was added in 1888, and in 1894, a third official, the linesman, came in.

Here was football as the public commonly saw it. Paul Dashiell once encountered the great John L. Sullivan in the wash room of a sleeper on a Boston-New York train. Sullivan had seen the Harvard-Yale game at Cambridge the previous afternoon, and Dashiell asked him how he liked it. John L.'s voice fell to a scandalized whisper. "There's murder in that game," he confided.

I heard the team talk of the game and the Marlin incident, but I do not recall that it impressed them as being excessively rough. Undoubtedly the reporter wrote with a mental picture of twenty-two early Christian martyrs being fed to the lions in the Colosseum to beguile a jaded Nero's afternoon, and necessarily he exaggerated. From the first the onlooker was most struck with the roughness of the game. In Big Bill Edwards' interesting Football Days, a compilation of reminiscences of stars of earlier years, Wyllis Terry tells of overhearing a young woman at the Harvard-Pennsylvania 1880 game at Philadelphia being asked, "If you were a mother and had a son, would you allow him to play football?" and her devious answer: "If I were a son and had a mother, you bet I'd play."

The spectator, himself soft and usually older, pictured himself on the receiving end of a tackle, forgetting how tough and resilient is the body of a youth, practice-hardened and in fine physical trim. The spectator knew nothing of the true inward-

ness of the play, but he did understand a sock in the nose.

Yet the reporter's picture was not made out of whole cloth. There was occasional dirty playing going on, and it increased later, as will be seen. Except for slugging, football probably was no rougher in 1884 than today, if as rough; but it did become much fiercer in the 90's. There should be an exception to the earlier part of this generalization. In the 80's, a player could leave the game only by being carried out. A substitution could be made only with the consent of the opposing captain, and he was apt to be as sympathetic as a sergeant of marines. The original Rugby code had permitted unlimited substitution, as today, but due to fraudulent substitutions the rule had been changed.

Penalties had been provided in the rules for foul play, but what constituted a foul was left largely to the referee's judgment, and through lack of moral courage, force of circumstances, or what, he often cultivated an excessive broad-mindedness. In 1887 the captains of the Wesleyan, Pennsylvania, Harvard, Princeton and Yale elevens formally signed a pledge to stop slugging and holding in the lines, a compact that would have been needless if the referee had been meeting his responsibilities. When the rules committee added the umpire the following year, the penalizing of rough play

became his special province, permitting the referee to concentrate on the ball.

In all my playing days I never was slugged, but I escaped narrowly in 1886. In the fall of 1885, fall baseball practice kept me away from football until well into the season, and it was greatly to my surprise that Captain Peters tried me out at right tackle against the Crescent Athletic Club, captained by Wyllis Terry. The Yale News mentioned me for several runs with the ball and for blocking one of Terry's kicks, but the proof of the pudding is to be found in the fact that I remained on the scrubs.

Fall baseball practice kept me away until November again in 1886, but on November thirteenth I was used in a game against Pennsylvania. The next day I wrote my sister: "Yesterday Yale beat Pennsylvania 75 to 0. Just think, I played part of the game. You know, I have been playing but a very few times and then only for exercise. Captain Corwin asked me to come out yesterday and substitute on account of a temporary lack of players, and when one of the men was disqualified, I took his place."

Before the Harvard game, Corwin told me that right tackle lay between Eddie Burke, now an Omaha cattleman, and me. Burke won out. Harvard was outclassed and roughed the Blue eleven up to offset the 29 to 4 score. George Woodruff

brought home a broken nose from Cambridge; George Carter, guard, came out of the game with a cut over the eye needing eight stitches; and Burke, who had beaten me out for right tackle, was a campus curiosity for several days. Both his eyes were closed and his lips were mangled and hideously swollen. He had had the bad luck to play opposite Remington, the Harvard champion heavyweight boxer. I saw the game as a substitute.

The only hurts I ever suffered were a perpetually skinned nose, due to the sandpaperlike surface of Smock's canvas jacket, bruised knees and sore arms. In tackling I had scuffed my knees until they threatened to stiffen, and I devised a protection all my own, binding a moist sponge inside my stockings over each knee.

When the scrummage was done away with and one man assigned to snap the ball back with his foot, he at once placed himself and all his line offside, where, theoretically, they could occupy only the precise positions in which they stood. Until now they had locked arms with their opponents. What more natural than that they should continue on offense to extend their arms forward to stop the defensive charge, and to hold their adversaries, if necessary? This led to a rule that the offensive line could not use hands or arms, but only their bodies, to obstruct, while the defense might employ all three to open a passage for themselves.

We used to line up with our arms straight out and take such a pounding on the arms from the defensive side, as they tried to force their way through, that we would ache from wrist to shoulder for two days. I recall Sam Cross, my classmate, who played right tackle in 1887, having his arms so badly bruised that Bobby Winston, Yale's first trainer, laid a wet towel over them and ironed them with a hot sadiron. Cross was such an Indian that he said nothing, but when Winston removed the towels the skin came with them. Cross went on playing just the same.

Thanks to the playing of the Princeton-Yale match of 1885 at New Haven, I was present and saw Tilly Lamar's great ninety-yard run for a touchdown toward the end of the game, winning 6 to 5 for Princeton, the first Garrison-finish run of the kind in the annals of the sport. Both Lamar and Fred Brokaw, another Princeton gridiron hero, were drowned, each in trying to save a girl, Lamar soon after he left school, Brokaw before he finished.

This was a hot kicking duel. In the first half G. A. Watkinson, Yale left half, lifted the ball over the Tiger goal for five points. As the second half neared its close, with Yale still leading 5 to 0, Watkinson sent a low diagonal punt from near midfield, about ten yards out from the left sideline. Three Princeton backs lay back, well spread out, for the kick, Toler in the middle, Lamar to the

right and Savage to the left. The kick came toward Toler. He could not quite reach it, and as he attempted to scoop it up on the bound as he ran forward, it glanced far off his body toward Lamar, who took it on the bound and was off. The Yale team was pulled toward Toler and caught off guard. Lamar was away to a flying start, clear of all the Yale forwards; then, swerving and dodging prettily, he passed and outran Beecher, Bull and Watkinson in turn. Captain Peters came desperately from behind and nearly overtook him as he crossed the goal line. To Lamar's four points R. M. Hodge added two by kicking goal, and Princeton won, game and championship.

Big Pete threw himself on the ground and sobbed. It was my first sight of a man crying at an athletic contest. I have seen hundreds weep since.

In a Princeton account of this game I found the following: "In the first half all of Princeton's trick plays fell flat because of the unfair yet legal interference of the Yale center"—Peters—"with the ball when it was about to be snapped. However, the determination to win under any difficulties, yet with gentlemanly playing, appeared in the second half."

This plaint might have come with better grace from another school than the one that invented the block game and the one that had devised a coat of tallow for Smock's canvas vest to skid the hands

of tacklers, a trick that forced new legislation. Unlike Smock, the inventor of the lubricant is anonymous in the Princeton records. So also is the player who first thought of daubing turpentine on his hands to improve his tackling grip, and forced still further legislation. All these, together with Peters' interference with the ball, are further chapters in the continuous effort at beating the rules, alike indulged in by Princeton, Yale and all.

As early as February, 1885, Walter Camp had tried to convince the rules body of the advantage of separating the rush lines by a neutral zone of five yards, and had been voted down. The two lines played high and sparred considerably, and the sensible neutral zone was not created until 1908, and then only because of Harvard's tactics in having their linesmen cross over in front of the ball as the opposing linesmen were getting set.

Like the opening of Pandora's box, the abolition of scrummage let loose a cloud of trouble. As another example, the question arose at once as to how much right each side had to the ball. In scrummage, it had belonged to neither or to both. Now the convention decreed that half the ball belonged to each side, with the qualification that the defensive center could not put the ball into play, nor could he disturb it until the moment it went into play. This was vague and unsatisfactory, and the rule was amended to read that the defensive center

could not interfere until the ball actually was in motion. What Princeton objected to was Peters' feinting and spatting at the ball with his hands, and his ragging of Adams, the Tiger center.

Although the foot was used in passing, the hand could be employed to steady the ball. This evolved in 1890 into passing directly with the hands to insure greater accuracy. The previous season, as a sop to the rules, the ball had been touched to the foot with the hands at the moment of passing. The original rules had prohibited all this explicitly, of course; but even in England there had been endless argument as to just where the scrummage ended and the ball could be picked up, while in America the confusion was hopeless. It resulted here in a rule that the center and quarter could not carry the ball until it had passed through a third player's hands or touch. In Harry Beecher's time at quarter for Yale, '85 to '88, he carried the ball frequently, but a guard handed it to him. Beecher's signal for this play was for the captain to clear his throat.

Hark back to the letter of the Princeton student who opined that Harvard did not play roughly enough. A row, in which the newspapers joined, followed Harvard's 6-34 defeat by Princeton that year, and the Harvard faculty abolished football on the report of a faculty investigating committee.

Walter Camp rose to a spirited defense of the game. I quote him: "As to the recent attacks on the

game, every true player has felt them most bitterly. There is no game better loved. There is about the sport a fascination that none but players knows, but which is far beyond that of any other sport. The bonds uniting old football men are strong enough to conquer any other association. When recounting bygone games, telling over again of magnificent runs, the beautiful drop, how the game was lost and won, enthusiasm grows strong, the time slips by, and true football lore obliterates for the time all antagonisms and rivalry.

"Is it surprising, then, that any blow struck at this game stings them to strong expression? Is it surprising that they refuse to stand by with folded arms and see their game butchered? If it were a fair trial before a logical jury, with expert witnesses, that had resulted in conviction they might keep their sorrow to themselves. . . . These investigators say 'We witnessed four games.' The number played was nearly a hundred. Football players learned in college to laugh at the reasoning of the simple inhabitants of Africa who said 'All men are black.' If the faculty of any college accept such logic they must do it on the ground that the investigators knew more of sports, and particularly of football, then they did of logic. But these men were not experts; they were barely acquainted with the rules in print, nor at all in their application.

"Football players are gentlemen, and their sport has been characterized as ungentlemanly, brutal and demoralizing. Why is it that no rough can be found, then, who can play the game? Why is it that there are no professional teams to play a game that draws 10,000 spectators? Why is it that it attracts the best field audience ever seen?

"For the reason that it is a gentleman's game." And here Mr. Camp unfurled the bloody shirt. "As the 'dandy' gentleman regiments in the war outmarched, outfought and outplucked the 'bloody rebs,' so gentleman teams and gentleman players will always hold the football field. Brutes haven't the pluck. The only field where no professional has dared intrude now is closed by those who a year ago were so fearful of their inroads. The only purely outdoor exercise, the only chance for executive abilities of the highest order, is cut off, driving men to the gymnasium when they should be out-of-doors, and turning them to far worse pursuits. Just! No one can look at the case and call it that. Then do not blame old lovers of the sport for bitterly blaming the unfair methods and the concealed motives of the instigators in this underhand stabbing."

The sport that inspired this affection and indignant defense was only nine years old in the United States.

Harvard's action was serious enough to arouse

the rules committee that winter into the most drastic changes yet. The maul in goal was abolished. One point penalty was fixed for intentional delay of the game or offside play; another point and disqualification for a second offense. The maximum delay for any cause was fixed at five minutes, with forfeiture against the side which refused to resume. The rule on roughness and piling up was rewritten. The judges were thrown out. The man first receiving the ball from the center was forbidden to carry it forward. Membership of a college team was limited to regularly enrolled students. Violations of Rules 17 and 28 were made punishable by disqualification, with two points for the other side.

Harvard persisted in not playing, despite these reforms; but that fall another faculty committee of observation attended various games and reported in favor of lifting the ban. If you recall my account of what happened to my rival, Burke, in the '86 game at Cambridge, you may question whether Harvard caught the spirit of the reforms.

Another factor that influenced Harvard's decision to return to the game was that Yale and Princeton in 1885 played on a college field, New Haven, for the first time. The game attracted the ladies in numbers, as it never had done in New York up to then, and established itself on the social calendar. It needed just such support at the moment.

CHAPTER VI

PLAYING END FOR YALE

I SING of football, but I have to revert to baseball. Jim McMillan, son of a United States senator and president of the Michigan Central Railroad, was captain of the freshman nine in 1885, and put me at third base. Jumping-Jack Jones, Yale '83, who had turned professional, worked with the pitchers in the basement of the old gym that winter and fancied the box work of another freshman, Willett, who pitched for the varsity all season. The varsity third baseman having a bad day on the same afternoon that I made three hits, one a two-bagger, and fielded my position well against the Harvard freshmen, I was given his place and played regularly in the remaining six games of the intercollegiate league schedule.

Phil Stewart, now of Colorado Springs, son of a Vermont senator and an intimate himself of President Roosevelt, was captain in 1886, and that winter he invented the first batting cage known to the game. He had built a crude frame building where the gym now stands, seventy-five feet long by

twenty feet wide, with a skylight. We practiced hitting and fielding here all winter. The pitchers took turns in tossing up to the batters. Stewart asked me to spell them.

"I'll do it if you will consider me as a candidate for the position," I told him. He said nothing, but sent Sam Bremner to Orange to look up my record, I learned later. Bremner reported back that I was a local sensation; but meanwhile a wonder had come out of the new freshman class, Jesse Dann, of Buffalo. He had great speed, so great that we could find no catcher to hold him. Because of that, Dann shifted to catcher for me and the Stagg and Dann battery, as it was called, became famous in college baseball. Our first game came at Philadelphia against the Athletics. We were uniformly bad and were slaughtered. I pitched every intercollegiate league game that season and we came down to a tie with Harvard for the championship. The play-off was at Hartford on a very hot day. Harvard had the veteran battery, Nichols and Allen, who had won the pennant in 1885. The Yale crew, which had won from Harvard the previous day, was present with several hundred students and alumni, and we won for them, 8 to 3. I pitched four more seasons and each of these years we won the championship.

Immediately after that first championship won from Harvard offers of twenty-five dollars a game

to pitch began to come from town teams, none of which I accepted. The rule on amateur standing was definite in 1886. I went home to cut hay on the Newark salt meadows five days a week and to pitch every Saturday for the Orange Athletic Club, an amateur team.

On April 26, 1887, we played the old Boston Nationals under college rules, limiting a batter to three strikes, and six balls giving a base, and beat them 2 to 1. In the ninth inning I struck out Ten-Thousand-Dollar Kelly, the Babe Ruth of his time, and became a baseball celebrity. As Kelly reached the bench where his team mates were, he is reported to have said in a tone of mingled surprise and disgust; "Think of a son of a gun who can pitch like that going to be a minister."

This year and the next, six National League teams offered me a pitching contract. Indianapolis was first, then Detroit, and in May the Metropolitans wired a bid of $3000 to pitch from June to November.

I declined, and I still preserve an entertaining letter from Jim O'Rourke of the New York Nationals, couched in a tone of high moral indignation. "While your college friends—unreal through their fiendish selfishness—are urging you in the interest of patriotism, college patriotism, to remain an unbleached amateur simply and purely to satisfy their gluttonish love of the game," he wrote, "your

real and dearest friends are using their every effort to have you better your financial condition in the world by accepting the advantages which the present opportunity presents. Can it be possible there exists no manliness or rather no pecuniary generosity, at Yale?"

I refused for two reasons. The first was loyalty to Yale, inasmuch as I should be lost to the team if I played professionally. The second was the character of professional baseball. Despite Mr. O'Rourke's literate eloquence, the professionals of his day were a hard-bitten lot, about whom grouped hangers-on, men and women, who were worse. There was a bar in every ball park, and the whole tone of the game was smelly. I had a great deal of confidence in my ability to say a loud and ringing no, but not quite enough to dare it that far. I had pride, too, in my financial independence and integrity. To Yale's credit, no one ever tried to make up the deficit by offering me a purse. When I was a senior and a member of Skull and Bones, a wealthy fellow member and alumnus offered me a loan of $500. I declined with thanks. I was in better shape financially by that time for one thing, but I never have borrowed a dime from an individual in my life, nor have I so much as bought an article on the installment plan. In Chicago we lived in the same flat for twenty-three years until we were able to buy a home for cash. The fear of

debt is apt to be drilled deep into the innards of one who was at close grips with poverty in his youth, as was I.

I was not a handsome youth, but that did not prevent me from getting notes from girls on my pitching record at Yale, not one to a hundred that come to the college athlete from the clear-eyed maidens, I believe they call them, of today; but I did get them. I never had been inside a theater until that year, when a fellow student took me. Another classmate dragged me to the Junior Prom, my first dance.

More than O'Rourke had called me fool. I had a freshman classmate at Yale, named Vinton, who had begun pitching at Andover. He joined the Philadelphia Athletics at $2000 a season without trying out for the Yale nine. He, for another, thought me silly. It was an ethical principle rather than a moral one. I never have capitalized my name, because I did not like the feel of it. This is the first writing I have done for many years. I have been too busy, in part, but I have refused repeated newspaper offers because I did not feel that I had the right, as athletic director of the University of Chicago, to give one newspaper preference over another.

On May 26, 1888, at Princeton, I struck out twenty men and let the Tigers down with two hits.

The game was to have been for the 1888 championship, but it rained steadily until four o'clock, by which time the field was so muddy that we refused to play. Mrs. Grover Cleveland was visiting at Princeton and was to attend. Rather than disappoint her, we played an exhibition contest. This has been told many times, but until now I have not disclosed why I reached the top of my form that afternoon. Mrs. Cleveland entered the grand stand wearing the orange and black of Princeton. As wife of the President of the United States, it seemed to me that she should have been neutral in word and deed, as a then Princeton professor later counseled the nation, as a successor to Cleveland, and I pitched my arm off in resentment. Presidents and their families have become more tactful. When the Chief Executive attends an Army-Navy game now, he sits in the navy stands one half, in the army stands the other half.

So for a time I was a newspaper celebrity, one of those incandescent particles that blaze so brightly for a few days or weeks, and vanish so utterly usually, when their little moment is over. "Pitcher Stagg at eve ne'er drinks his fill, which is why, dear boy, he fills the bill," wrote one newspaper paragrapher. I suppose he referred to an incident at New Haven when a crowd of students carried me in triumph on their shoulders after a

game and later marched into a saloon. I was asked to join in drinking my own health, and refused as gracefully as I could.

"The greatest man in America today undoubtedly is Pitcher Stagg," another paragrapher wrote. "Nines howl for him. We have no doubt that were he to visit Washington, D. C., Colonel Lamont would take off his hat to him." Another paragraph, from the Friar Point, Mississippi, Gazette, has not so lost its pertinency: "Just so long as the pitcher of a baseball club gets $3000 for six months' work, and a preacher $600 for a year's service, just so long will there be good pitching and poor preaching."

My final baseball season at Yale was 1890. We were tied again with Harvard for the championship and were to play the fifth and deciding game at Springfield, July third. The team had gone to Springfield the previous day, but I, who was bidding Yale good-bye forever, had stayed behind to pack my belongings. Two trains were waiting as I hurried into the New Haven station, a Boston Shore Line express and the Springfield special. Loaded down with bats and baggage, I arrived on the platform to see a train in motion. I ran for it and leaped aboard. Louis Leyersorf, who had been watching the crowds bound for the game, saw me, realized my error, leaped on the moving Boston train, found me locating myself in a seat and

STAGG AT BAT

RIGHT END STAGG

dragged me off. I made the Springfield train and we won, 4 to 3.

Even in professional baseball, base runners still were sliding headfirst into base, and feet foremost was thought the lesser art. In 1888 I rigged up an apparatus of my own design to improve our sliding. The principle was that of bed springs, much lengthened and covered with Brussels carpet. The men ran, dived and slid along this device to learn how to avoid ripping themselves open. The point of a good slide is to go along the ground rather than into the ground. Later, basemen so improved their blocking of the head slide that the runners were forced to turn around, hooking into the base with their feet.

A similar situation led to my invention of the football tackling dummy in the fall of 1889. The previous year the rules convention had lowered the tackling line to the knees, but the Yale squad continued to tackle high and poorly. To drill the new technic into them, I rolled a mattress up into an approximation of a man's body, suspended it from the gym roof and laid other mattresses flat beneath it. With this equipment, we ran the team through long tackling practices.

In dropping the tackling line, the rules body had made another momentous change intended to restore the balance between offense and defense, upset by better tackling. The rush line, which had

stretched with extended hands across the field in front of their opponents, was contracted shoulder to shoulder, as now. The backs, who had played far in the rear and as wide as the ends, were brought up to within five yards or less of the line, and sudden, furious plunges began to mark offensive play. It was this season that George Woodruff, at guard, first swung around the end ahead of the ball carrier.

From my freshman year I had done religious work through the Y. M. C. A. and New Haven missions. Dwight Hall, the Yale Y. M. C. A. building, was opened in my sophomore year, and in my post-graduate year I became student secretary. The Y was capitalizing my athletic prowess, and I even made talks out of town occasionally. I had wished to enter the divinity school in the fall of 1888, but the time required for the student secretary's job did not permit, so I enrolled for some courses in graduate study. One was Biblical literature, under William Rainey Harper, who later became the first president of the University of Chicago and took me West with him.

In the fall of 1888, my first graduate year, Pa Corbin, captain of the squad, asked me to turn out for right end to fill a vacancy left by the graduation of F. C. Pratt. I consulted the general secretary of the Y, Mr. Morse, a Yale man, and he urged me to accept on the ground that it would

increase my influence as a worker. Though the game had changed greatly by this time, the rush lines still were standing erect and sparring with the flats of their hands with the idea of having the opposition off balance as the ball was snapped. The ball continued to be passed with the foot. Every fall morning, between classes, the center, Captain Corbin, and the quarter, Wurtemburg, used to practice this foot passing. Like his predecessor, Peters, Pa Corbin was an adept at snapping the ball when the other side was napping, misleading them with his conversation and worrying the ball when in the other center's hands.

Walter Camp was a sort of voluntary advising coach. He still was working full time for a New Haven clock company, and Mrs. Camp—they had been married that year—was more the coach than he. She was out every afternoon for practice and made a detailed report from notes at night to her husband. In the evening and Sunday afternoons, Corbin—and I occasionally—would go to Camp's house to get his advice. When Corbin gave a twenty-fifth reunion dinner in 1913 at the Taft Hotel to the '88 team, Mr. and Mrs. Camp's photographs were given the first page of the souvenir menu, with the legend, Head Coaches, 1888. Billy Rhodes and myself were the only missing faces. A pressing engagement with Minnesota that afternoon kept me away.

We used to wind up every practice with a race to the opposite end of the field. I won usually, and Mike Murphy, who had just come to Yale as track coach, thought I might make a sprinter. He got me out for the fall games, my first time in spiked shoes. Walker, a real sprinter, ran away from me. I could do the 100 yards in 10⅘ seconds, but that is not sprinting in the big leagues. The team rode back from the new field in a bus after practice, but I usually ran behind the full mile and a quarter to develop endurance.

The '88 eleven was ever victorious, scoring 698 points to its opponents' 0, a record still unapproached in the East. The individual had not yet been merged into the whole so greatly as now, and it still was pretty much the fashion for one side of the line to rest while a play went through the other side. Heffelfinger made eight touchdowns from guard that season, his first. Charley Gill made fourteen touchdowns running from tackle that fall, and Wurtemburg, at quarter, twenty. Gifford Pinchot, who made George Woodruff his attorney-general when he became governor of Pennsylvania, was a sub on the squad, and its Adonis.

Lee McClung, later treasurer of the United States, another freshman recruit that season, scored 500 points for Yale in his four years at half—a personal record that still stands, I think.

McClung was the first man ever intentionally to

start as if to skirt the ends, then wheel diagonally back through the now-opened line. This was the trick that suggested to Woodruff the delayed pass, working on the same principle but with greater ease and effect; one of several distinct contributions he made to the game while coaching Penn. Two others were the guards back and the ends close in on defense. Penn worked the delayed pass on my Chicago team in 1898, the first time I had seen the play, and scored a touchdown in the last eleven seconds of the first half, John Outland, now a Kansas City surgeon, carrying the ball.

We began the 1888 season by smothering Wesleyan 105 to 0, and came down to the crucial Princeton game on Thanksgiving Day at New York with our goal line unthreatened. Some 12,000, a record crowd, saw that game, which we won 10 to 0, largely on Billy Bull's educated toe.

Princeton and Harvard had played a particularly hard game in 1887, in which the Harvard captain, Holden, had his breastbone broken accidentally. Each school was accusing the other of playing ringers and they fast were approaching their historic break.

There were five divinity students on the Princeton varsity, of whom it was said that they feared God and no one else. One of them, Hector Cowan, was captain in 1888. Cowan was a marvelous ball carrier and left lasting marks on Harvard and

Yale, though his most horrible oath was "Oh, sugar!"—a blasphemy that never failed to bring threats from his team to report him for rough talk.

It was in the Pennsylvania game that season that Charley Gill, brother of George, and a brilliant player offensively and defensively, had complained repeatedly to the umpire against a member of the Penn team, without result. In the second half two of Gill's front teeth were knocked out. Holding the teeth in his palm, he walked up to the umpire and exclaimed triumphantly, but indistinctly, "Pyaps y' don't b'li've he thlugged me now!"

In 1889 Sport Donnelly, of whom Heffelfinger said that he was the only man he ever knew who could slug and keep his eye on the ball at the same time, arrived on the Tiger team. Donnelly was even better than that. The Big Three teams lost heavily by graduations in 1889. That fall four Tiger football veterans returned for graduate or special work. At Harvard three came back, and at Yale four, I among them. I had been reëlected student secretary in 1889 and my time arranged to permit me to enter the divinity school.

The age and length of the playing career of some football warriors had been a source of humor for the student papers, but no objection had been entered until now about the playing of graduate and special students. The growing scandal of professionalism brought the issue to a head, and early

in November, 1889, Wesleyan and Yale united in a call for a meeting to determine certain questions of amateur standing. Walter Camp introduced a resolution limiting teams to men who were attending a fixed minimum of recitations weekly and barring anyone who had played any game for money. Princeton countered with an amendment to debar all students in graduate and professional schools, which would have disqualified four men each at Penn, Harvard and Yale. Harvard made a point of order; the meeting had been called only to consider questions of amateur standing. The point being sustained, Penn moved the adoption of that part of Camp's motion requiring a fixed minimum of recitations. Harvard rose to another point of order, but lost. Princeton now offered an amendment debarring a man who had played at one college from playing at another. Harvard made a third point of order and was upheld.

Harvard now formally entered protests against fifteen of the Princeton football squad, or virtually all, and Princeton countered by filing charges against four Harvard players. The convention adjourned for ten days to permit the protested players to answer, and both sides took their cases to the newspapers. The convention reconvened behind locked doors at the Fifth Avenue Hotel, with the corridors crowded with reporters, and disagreed.

Two days later Harvard and Princeton met on Jarvis Field, Cambridge, in the game which touched the final spark to the powder magazine. I was playing left end this year and was present as a scout. I had been asked to referee, but declined because I was a member of a rival team. Princeton won and within the week the Harvard student body, in a great mass meeting, voted to secede from the association. That body never recovered, though it survived until 1893.

Princeton operated that year under a coaching committee of three old players. The first half ended with the score 15 to 10 in Harvard's favor, and the three Tiger coaches made impassioned addresses to the team during the intermission, an early example of these Spartacus-to-his-Gladiators harangues which so stirred the public's imagination, and which were dramatized to admirable box-office effect in Strongheart, wherein Robert Edeson played the noble Indian halfback. While huskies guarded the doors inside and out against alien spies, and trainers and rubbers worked on the gladiators with arnica and bandages, the coach mounted a chair and cursed, sneered, exhorted or prayed all to die for dear old Rutgers, according to the coach's temperament or the exigencies of the situation.

At any rate Princeton returned furiously in the second half and smeared Harvard by a final score

of 41 to 15, one of the great rallies of the sport. One of the men playing for the Crimson was said to have been a Boston and Maine brakeman in private life. Professionally, he was a tower of strength in the Harvard line. Donnelly began working on this man from the start. The umpire's eye was on Sport, and the latter had no intention of being put out of the game. Instead, he tried in every way he knew—and he knew them all—to infuriate his opponent. Stickney knew and understood Sport's methods and finally beat him at his own game. At an opportune moment he irritated Donnelly and as the latter swung viciously at him, Stickney dramatically fell over backward, pretending to be hit, while Umpire Beecher promptly ruled Sport out of the game. In the second half Snake Ames, the Princeton fullback and the Red Grange of his day, ran wild through the Crimson, who faded badly in endurance and morale.

I was present in particular to study Ames, and I noted that he invariably reversed in running with the ball. When we met Princeton at Berkeley Oval, in what is now the Bronx, I nailed Ames three times as he was on his way to a touchdown, thanks to that observation. Unfortunately Josh Hartwell, the other Yale end, now a New York surgeon, had a bad Charley horse that day, and we had no substitute for him. Both of Princeton's touchdowns, however, were scored on Yale fumbles behind the

goal line, following tries at field goals by Ames. The field was sloppy and the ball like a greased pig.

I participated in one of these fumbles. Herbert McBride, new to the team that season, was playing fullback and safety. Although a brilliant player, he was erratic at times. I started back on Ames' kick, just ahead of Warren, a Princeton end, to back up McBride in case of a fumble. The wind carried the ball over McBride's head. All he had to do was to overtake it, touch it with his hand and cry "Down!" Instead he dived for it like a wild man; the slippery ball shot out from under him and angled off toward the bleachers which partly encircled the running track. Warren and I raced for it, I a yard in the lead. We could only guess the angle at which the ball would rebound. My guess turned out to be one of those miss-is-as-good-as-a-mile estimates. The ball described an eccentric course, I dived for it, grazed it with my hand, but it just eluded me and Warren fell on it for a touchdown. It was not my responsibility; I was not supposed to be on hand, but having anticipated the fumble I was furious with myself at failing.

Princeton first sprang the fake kick, claimed as a Tiger invention, in this game to frustrate Gill, who could break through once in three or four times and block a kick. Ames dropped back as if to kick, Gill plunged through as usual, and as he passed toward Ames, Channing shot through Gill's va-

cated position with the ball. Gill contrived to turn and grab Channing, preventing a gain, but thereafter Charley was so wary of the trick that Ames was able to kick without hindrance. That often is the greatest value of a trick play.

The quarter then stood close behind the center to take the foot-passed balls, and Wurtemburg's signal for passing was a pressing of two fingers on the hips of Hanson, the center. The quarter was accustomed to taking his time in deciding on the next play, and often dropped back to consult with the other backs. Princeton detected the passing signal. Long Tommy Thomas, six feet six inches tall, was at right guard for them, and House Janeway suggested to him that he reach over the first time Wurtemburg turned his back and pinch Hanson's posterior. Third down came for Yale with two yards to gain and Wurtemburg fell back to confer with the halves. Long Tommy then reached a long arm slyly out and gently nipped Hanson. The Yale center obediently passed the ball into space and Janeway broke through and fell on it for a ten-yard gain and Princeton's first down. We were furious with the bewildered Hanson and did not discover Princeton's infamy until after the game.

Donnelly concentrated this afternoon on Rhodes, his opposing tackle. Failing with verbal abuse, he smeared two handfuls of the readily avail-

able mud in Rhodes' face and already was crying "Mr. Umpire!" by the time Rhodes walloped him. Rhodes got his marching orders from the umpire, of course. Princeton has argued that he had punched Channing earlier in the game and had it coming to him.

Slugging had been countenanced so long that penalties were slow in halting the practice. Harvard and Yale fought a terrific battle at Springfield in 1894 that led to a break in their relations. In Big Bill Edwards' day at Princeton the scrubs used to appear for final practice before the Yale game in white sweaters with great blue Y's, and take the names of the Yale eleven. Edwards testifies in his book that slugging occurred even in practices, the varsity becoming frantic if they failed to score on the culls. Edwards, on the scrubs, was going through low and tackling Crowdis, varsity left guard, before he could get started. Bill Church, varsity left tackle, grew so enraged at Edwards that he demanded that Crowdis wallop him. "If you don't, I will," he added. Crowdis was too good-natured, but in the next scrimmage Church handed Edwards one that still marks the lobe of one ear of that prominent Democrat.

In 1897 the Princeton coaches had made, as they thought, a study of the temperament of Charlie Chadwick, Yale's strong man, with the verdict that he was yellow. Edwards was coached to ride

him, and delivered Princeton's opening message in the form of a straight-arm blow. Chadwick socked him back and the battle was on. The umpire, Paul Dashiell, scolded them and let both stay in the game. Edwards records the fact that as psychologists the coaches were first-grade Holland cheeses. Instead of unnerving Chadwick, the attack spurred him on to new heights, at Edwards' expense.

Bill Horr, of Colgate and Syracuse, tells in the same book of being thought too good-natured for the good of Syracuse in a Lafayette game at Easton. Horr played opposite Dowd, the Lafayette captain. Barry played alongside Horr. As the teams lined up for the first scrimmage of the second half, Horr got a stinging blow on an ear.

"Who did that?" Horr demanded. Barry pointed to Dowd, and Horr went out for blood. It was a year later before Horr learned that as the team went on the field after the intermission, Bucky O'Neil, Syracuse coach, had instructed Barry to wallop him and make him fighting mad.

Sometimes slugging grew out of prep-school feuds carried over into college. Victor Harding, Harvard '89, and Yup Cook, Princeton '89, had played with bad blood on Exeter and Andover respectively. When they met for the first time in a Harvard-Princeton game, Cook picked Harding up, slammed him down and walked off the field without waiting for the umpire's invitation.

The 1889 game gave the championship to Princeton, but life still was supportable at Yale. Since the formation of the Football Association in 1879, the Blue had won the title five times to Princeton's once and Harvard's blank. Yale had won ninety-three out of ninety-eight games, losing three times to Princeton, once to Harvard and once to Columbia. Since points had been scored, our total was 3001 to our opponents' 56. And Camp had named me left end on his mythical all-American eleven of 1889.

As Pa Corbin remarked at a Yale banquet in New York, it was a good deal like what the old man said about a righteous life—it was monotonous, but satisfactory.

CHAPTER VII

ABRACADABRA

WILL ROGERS came back from a lecture tour of the South a year ago last winter with a story of a football game between Alabama Normal and Tuskegee Institute, both negro schools. The Normal had something new to Rogers in rooting. Instead of the usual male dancing-dervish cheer leaders, a line of negro girls, all in white dresses, stood in front of the Normal section, linked arms and led the local war cries.

An epidemic of fumbling seized upon Tuskegee early in the game, to be capitalized immediately by the quick-witted daisy chain. In a minor chord, to a Blues rhythm, they set up the chant.

Tah-dee-dah, tee-tah-tah, tee-dah,
Tus-kee-gee's got the dropsy,
Tah-dee-dah, tee-tah-tah, tee-dah,
Tus-ke-e-e-ge-e-e's got the drop-se-e-e.

The girls swayed their bodies rhythmically while they sang.

The Normal stands took up the chant, stopping only to slap their legs and cackle with glee, and

the Booker T. Washington school's game went blooey.

It is a good story, its only defect being that the records show that the game, played at Montgomery, November 7, 1925, was won by Tuskegee, 14 to 0. Mr. Rogers felt, no doubt, that such inspired rooting should have destroyed Tuskegee, even if it didn't.

Another negro football story comes from Auburn, Alabama, the home of Alabama Polytech, in several versions. I have heard Knute Rockne, Notre Dame coach, tell one version. Another is credited in William H. Edwards' book to W. R. Tichenor, veteran Southern football official.

Since Sherman marched from Atlanta to the sea, Bob Sponsor has been Auburn's rubber, more or less. Bob had taken a pick-up town team from Auburn to Tuskegee to play the institute one Christmas, and faring illy, had called on a white friend to make a touch. The white man was interested in the details. "What did you do about signals?" he asked.

"Dem niggers of mine couldn't learn no signals," Bob explained. "I jes' chatter some numbers to fool dem Tuskegees, but de numbers didn't mean nothin'. I'd say, 'Eight billions, forty-seven millions, six hundred an' 'leven thousan', nine hundred an' ninety-nine; tek dat ball, Rancey, and go round dat lef' end!' Dose de mos' signals dem nig-

gers could learn, and dey doan always git dem. 'At's how come we gits beat and leaves our money in Tuskegee. Mistah Titch, Ah'm jes' as nickelless as a ha'nt. Kain't you-all len' me two bits till Sadday, please, suh? Hones' I pays you back."

Yale invented numerical signals in 1889, my second year on the varsity. Rehearsed plays and signals to designate them came in soon after the abolition of the English scrummage, but words, phrases or motions gave the cues to the play.

Pa Corbin, captain of Yale '88, used to keep up a continuous chatter at center, most of it meaningless, to confuse the enemy, while he gave his real signals by touching various parts of his body with his hands. Corbin sometimes used his cap to dial certain plays. In one Princeton game the Tigers concluded that the cap was the key to all Yale's strategy, and spent much of the afternoon trying to steal it.

The Zouave toques with long tassels had been replaced with virtual skullcaps, a button in the center, by the time I made the varsity; but Yale men still talked of how C. S. Beck, '83, getting down under a high kick from his own side before the ball descended, took off his toque, waved it by the tassel in the face of the Princeton player waiting for the ball and caused him to muff the catch. The rules were changed after this to penalize such interference. Caps had no place in football and

passed out of the picture shortly, but the rule still is there and, like some others, meaningless to the boy of today.

Yale's 1888 signals were given entirely by the position of the captain's hands. Corbin graduated in 1889, and that fall we began with a system of key words and phrases, switching to numbers late in the season.

Out of the forbidding accumulation of memorabilia in our Chicago home, Mrs. Stagg has exhumed a copy of our first 1889 code book. Some of the signals were:

Speak to right rusher—left half around the end.

Speak to the left rusher—right half around the end.

Praising any play—left half between right tackle and end.

Condemning any play—right half between left tackle and end.

Mention of any part of the legs or feet—left half between left guard and tackle.

Speak of the head—right half between right guard and tackle.

Speak of any part of the torso—left half between left guard and center.

Any part of the arms or hands—right half between right guard and center.

Anything with vim or life—left half between right guard and tackle.

Anything denoting lifelessness—right half between left guard and tackle.

The word "neck"—left half between right guard and center.

The word "hips"—right half between left guard and center.

Anything denoting gait or walk—Heffelfinger, left guard, between right guard and center.

Gaining ground—Gill, left tackle, run around opposite end.

Any question—Gill between right guard and tackle.

"Remember"—the quarter carries the ball.

Mention of any opponent by name—crisscross play.

Losing ground—the wedge.

Cowardly play—Rhodes, right tackle, comes around.

Anything denoting an opening—kick.

Signals are essential, manifestly, but their importance can be overstressed. They became more and more complex in the later 90's, running into problems in addition, multiplications, subtraction, even division, until football threatened to become an advanced course in mental arithmetic. Long signal drills were held at night. Such complexity defeated itself and more ground was lost by the inability of players to remember their own signals than was gained through the opposition's mysti-

fication. I never have heard of algebraic signals, but it is my observation that everything has been tried once in football, and therefore quite possible that "Let *x* equal the ball" has been propounded by some quarterback. In this period some coaches and schools wasted much valuable effort in trying to steal or buy the rival's code, usually for the big game, and spies were as thick, by report, as they are in an E. Phillips Oppenheim novel.

I always have ignored the other fellow's signals. A player worth his salt can see far more with his eyes than he can hear with his ears in defensive play.

Carlisle is said to have used Indian words during Jim Thorpe's time, but so many different tribes and languages were represented on the team that it served little advantage. Possibly their Chattahoochees and Wawamissinings were intended only to distract the paleface's attention. If there is any jargon unintelligible to the uninitiate, it is the terminology of sailing ships, and the early Annapolis elevens used to sing a very salty signal. The left half was the mainmast, the fullback the mizzen, and the anchor called for a kick. To hear a navy quarter sing out "Furl the topgallant clew lines and hands by the halyards" shivered the timbers of many a landlubberly opponent.

When Childs of Yale coached Indiana he took a

leaf out of nautical practice. The Hoosiers came up to play us one year, lined up in double file and chanted their signals in unison to set up a rhythm, on the same theory that the sailor sings a chantey in turning the capstan or a section gang in shifting railroad steel. Some found this choir practice laughable, but the idea is thoroughly sound.

All coaches probably use rhythms; I have for many years, to insure men being in the right position at the right second on shift plays. Men cannot be shifted back and forth effectively without some form of rhythm. Some of the team, at times all eleven, must know precisely when the ball will be snapped, and to insure more than two or three men working in perfect unison, some method of timing is mandatory. The army drillmaster's one-two-three-four will serve, so will a popular song melody—anything that can be accented rhythmically, the ball going into play on the agreed emphasis. Hurdlers frequently hum some rhythm under their breath to time their stride properly between hurdles. Childs used to train his middle and long distance runners at Indiana behind a sulky pulled by a harness horse, to teach them pace.

Something of Swede Oberlander's deadly accuracy with the forward pass at Dartmouth in 1925, I have heard, was due to his timing his passes to the rhythm of:

Ten thousand Swedes
Came out of the weeds
At the battle of Copenhagen.

An inability to talk easily on my feet led me to put aside the cloth and to leave Yale in 1890, after only one year in the divinity school. The more often I spoke in Y. M. C. A. work, the deeper sank in the conviction that I was not cut out for the job. I thought the conviction privy to myself, but it was shared by others, I came to find. In 1888 I had hung up my scythe for good, orphaned the mosquitoes of Newark Bay, and gone to Chautauqua Lake to take charge of athletics. Later I did similar work at Dwight L. Moody's student conference at Northfield, Massachusetts, and at Lake Geneva, Wisconsin. At Lake Geneva, in 1892, I followed John R. Mott, whom President Wilson later called the greatest international statesman, and L. D. Wishard on the platform one night. Mott was a younger man than I, but already a brilliant speaker. I spoke badly enough, and was worse by contrast. Sitting in my tent in the dark, thoroughly discouraged, after the meeting, I told myself once more that I could influence others to Christian ideals more effectively on the field than in the pulpit, when Mott and Wishard passed on the way to their tents.

I overheard Mott say, "I can't understand why

Stagg simply can't make a talk." Wishard clucked commiseratingly.

Here was expert confirmation of my own doubts and escape from addressing student mass meetings. I very rarely spoke publicly again until I was fifty-nine years old. At that age I decided that I was entitled to talk. Nowadays they even pay me money to do it, and I am much more in demand than my time permits. My way of saying it possibly has not improved notably, but I have considerably more to say at sixty-four than at twenty-nine, which is as it should be.

The International Y. M. C. A. training school at Springfield, Massachusetts, had been opened in 1890, and Doctor Gulick, head of the physical department, sold me on the idea of turning to Y. M. C. A. physical direction. I entered as a student in a class of four and later was made a member of the faculty, with the formidable title of instructor in the theory and practice of training. Another of the four was James Naismith, inventor of basket ball. I had been sent out with a suitcase of stereopticon slides to lecture on the modern athlete, and incidentally to advertise the school, when Doctor Gulick asked the remaining three to turn their wits toward devising a new game. Naismith, who has been at the University of Kansas for many years now, began with the idea of adapting an Association football to indoor play and quickly worked

out the game which now ranks second only to football in most American schools. Naismith's first baskets were ordinary half-bushel vegetable containers hung from the running track, with someone stationed on the track to empty them after a goal. Later he switched to peach baskets because of their greater depth. One of my sisters, now teaching at Miss Thurston's school in Pittsburgh, was teaching then at a girls' school in Stamford, Connecticut. She has sent me a letter that I wrote her on March 10, 1892, enthusiastically describing the new game and recommending it to her for adoption by girls.

At Springfield in 1890 I coached my first football squad. There were forty-two students all told, and I still am a little proud of the fact that from such a handful I produced teams that defeated a number of New England colleges and made the best of them exert themselves.

I made my second big contribution to the strategy of the game here in the use of my ends. At end for Yale I had perceived that I could do more effective work as interference for the runner by lining up slightly back than in conventional line play. Out of this experience I pulled my ends back out of the line, used them like backs to carry the ball around the opposite ends and to drive into the line ahead of the ball carrier, both revolu-

tionary practices which were copied by other schools and claimed as original. For the next fourteen years, until six men were required to be on the line of scrimmage, this formation was much used.

Camp's small wedge in the line had been only a push, used mainly near the goal line, the quarter passing to the fullback, then shoving him from behind. In line attack I now sent the on end ahead to break a way, followed by the off end, the on half, the fullback, and sometimes the quarter, the off half bearing up at the rear with the ball. When the fullback carried the ball on a buck, he was preceded by the on end, the off end, the on half and the off half successively, while the quarterback pushed after handing the ball. On certain plays the off half pushed also. From this point on, the scrimmage began to be strenuous. Camp's wedge first had forced the opposing lines to play low to stop it, but only that part of the line immediately attacked dropped down. The lines did not get down on the ground in earnest and take the brunt of the attack on their heads and necks until Woodruff introduced his guards-back formation at Pennsylvania in 1895, pulling both guards out of the line either to carry the ball or to smash a path ahead of it. Meanwhile I had been doing the same thing with my tackles from 1894 on.

Camp sometimes had varied his scrimmage wedge by shooting his backs on a sudden wide dash to one side or the other after his opposition had been drawn in to combat the wedge. We carried this a step farther at Springfield in Doctor Seerley's dream play. Doc, our fullback, insisted that the trick formation had come to him in a dream. On this variation of the Camp wedge, the halves and quarter suddenly would deploy around an end, slipping the ball to Doc as they veered. He would bend over in a huddle, concealing his precious package. When the hounds were in full cry after the decoys, he would straighten up and continue via the short line. We tried it first on Harvard when we were on their five-yard line, and old Doc just stepped across their goal for a touchdown, to the unutterable annoyance of the Crimson. We tricked that unofficial Yale team with it for a touchdown in the Madison Square Garden night game, and Amherst, Wesleyan and other lesser opponents swallowed it even more eagerly.

The hidden-ball play took many forms, the ultimate and most famous of which was the exhibition of parlor magic which Pop Warner's Carlisle Indians gave for an unappreciative Harvard audience in 1903. Harvard kicked off at the start of the game. As Dillon of Carlisle received the ball, his mates gathered closely about him. A moment later the mass burst asunder and scattered in every

direction, the ball nowhere in sight. Of all the Indian eleven, only Dillon obviously did not have it, for he charged forward with his arms empty and straight before him. Harvard stepped aside to let him pass and played button-button-who's got-the-button? with the rest of the Carlisle team. Dillon arrived at the Harvard goal, produced the ball from the back of his sweater like a rabbit from a hat and deposited it ceremoniously for a touchdown.

Another coach, I have heard, once embroidered a football on the chests of the jerseys of his back field as camouflage. In Percy Haughton's first season at Harvard, the report got around that Warner had another rabbit in his hat; this time he was sewing a piece of leather, the shape and color of a football, on the jerseys of the Carlisle back field for the Harvard game. The rule book, upon examination, gave Haughton no comfort; it did not cover such a contingency. But stay! It said nothing, either, about painting the ball. Harvard tinted a ball the precise shade of crimson affected at Cambridge and was all prepared to demand that the game be played with a red ball; but Carlisle arrived in regulation jerseys.

"Lurking along the sidelines" refers to a trick that was seen more often in high school and minor-college games, where the spectators were allowed often to crowd onto the sidelines, than in major

contests. Particularly after the introduction of the forward pass, it was not uncommon for a player to slip off unnoticed into the sideline crowd and lie in wait for a pass. The rule makers did not get around to legislating against it until 1914. It was possibly of use at one time even without a crowd for cover, for originally there was no restriction against substitutes standing on the sidelines. No one is allowed there now, but as late as 1911 five players to each side were permitted to walk up and down the sidelines, reduced to three that year, to one in 1912, and prohibited altogether since 1914. Possibly the first instance of the trick came about by accident in a game at Easton, Pennsylvania, about 1896, between Lafayette and Penn State. Parke Davis tells the story. Morton F. Jones, the Lafayette center, left the field to change his headgear. A moment later a Nittany Lion broke through and was within ten yards of the Lafayette goal when Jones abruptly appeared from the sidelines and nailed the runner so hard that he dropped the ball. Penn State lost by the margin of that frustrated touchdown.

My second Springfield team played the first indoor football game ever staged, against a team that included five of the Yale varsity, in Madison Square Garden after the close of the 1891 season, as a part of the three-day winter field games of the Staten Island Athletic Club. The game was scheduled for

nine P. M., but the earlier events having been run off slowly, it was nearly midnight before we got into action. The reporters and spectators were troubled by the International Young Men's Christian Association Training School and settled finally on Christians as our name. We were leading, 10 to 6, toward the end of the game, and Yale, with Heffelfinger in the vanguard, was marching down on our goal, when the old-fashioned electric carbon arc lights sputtered and went out. They flashed on again, and Yale resumed its march, scoring a touchdown and evening the score. Morrison tried for goal. The ball struck the post and bounded back into the arms of Josh Hartwell as he was charging down on us. In that day the ball continued in play when a try at goal failed, and Hartwell was on our five-yard line before we pulled him down. Yale pushed the ball over for an extra touchdown, kicked goal, and won, 16 to 10.

We used to practice deliberately at missing a goal kick after touchdown when I was at Yale, an end being stationed in a strategic spot to recover the ball. It was too familiar a trick to use on a major opponent, but we caught a green team with it occasionally. I have scored as many as two extra touchdowns on one bona-fide crossing of the goal line through recovering carefully missed goal kicks. The rules never having contemplated such a situation, it had not been provided for, and there-

fore was entirely legal—one more instance of beating the rules.

The very scantiness of my material at Springfield served as an advantage in one way. Caspar Whitney, who had a weekly column in Harper's Weekly, was the great football pundit of the time. Writing on November 21, 1891, he said: "Here is a school that contains just forty-two boys, and yet out of these Stagg has succeeded in developing a team that has made those of Harvard and Yale play ball. I acknowledge at once that the school is favored exceptionally in having so thorough a student of the game as Mr. Stagg to lead; but are not Yale, Harvard and Princeton supposed to be, and generally are, provided with expert coaches? The prime difference is that Stagg picks the most likely boy for a position, puts him in it and drills him continuously in the theory and practice of playing it; while the others, rich in candidates, try one after another in the line, leaving them to grope and bang against one another with little or no aid from the coaches, tumbling into their positions after weeks of work. If Stagg, out of a school of forty-two, could develop the team he has, what could he not have done with eleven such men as will face Yale Saturday?"

A New York editorial writer grew quite lyric over my coaching that same fall. "Mr. Stagg is without doubt the finest football strategist in the

United States," he asserted. "It is he who originated the tricks and teamwork which have made Yale so almost invincible on the field. Such capacity at organization shows one of the highest types of intellect. Mr. Stagg has the stuff in him of which great men are made. As a general of armies, as an admiral of fleets, as a great business man whose field is bounded only by continent lines, Mr. Stagg would undoubtedly make his name known throughout the world. Instead of entering upon any of these careers, he is about to accept charge of the Department of Athletics in Yale. Mr. Stagg, believe us, you are making a great mistake in wasting such genius in so humble lines. A great strategist like you can make his choice among the most lucrative occupations of life and is sure of success wherever he goes." And even more in that vein.

CHAPTER VIII

GO WEST, YOUNG MAN

AMONG his several overstatements was that about my returning to Yale. Overtures had come from New Haven, but I was going to take charge of athletics at a university the first stone of which had not been laid.

Writeups like those from which I have quoted brought requests for football articles from Johnson's Encyclopedia and the New York Sun. The latter, printed on Nov. 22, 1891, gives a diagram of positions on offense and defense. The thing of particular interest shown is the box defense, which most coaches and sport writers have regarded as of comparatively recent origin. Another paragraph in the same article as follows, pictures certain features of play common after the introduction of the snapperback in 1880 and through my first season as a regular on the Yale team.

"Up to 1888, the center rusher sometimes put the ball into play by making a bunt kick and then picking it up and running with it. In the Yale-Harvard game of that year, Corbin, Yale's center

rusher, distinguished himself by doing this twice for long gains, one of them netting a touchdown. The quarterback also was more frequently used for running through the line than now, but the ball used to be handed to him by one of the guards, who picked it out from under the snapperback's foot."

It was a poor player who could not find a job as coach in the early 90's. The game had burst the confines of the Big Three and its immediate satellites, and coaches were few and in demand. Minnesota, which had been playing desultorily since 1883, first met Wisconsin in 1890. Kansas, Nebraska, Missouri and Iowa organized the old Western Intercollegiate Football Association, and the Army met the Navy in their pioneer game. Three years later the Secretaries of War and the Navy abolished the match as a result of public outcry over injuries in the 1893 season, and it was not resumed until 1899 at Philadelphia, long its home.

The Army and Navy are conservative institutions, and football was a stray dog on the premises for a while. Making the team brought no privileges. Saturday afternoon was a holiday and those who wished might devote it to football, but at Annapolis they spent the morning, like their mates, galloping up and down the ratlines and shrouds of an old training hulk in the bay at sail drill. The entrance ages at the academy were fourteen to

eighteen then and their teams of prep-school caliber.

The cadets fared still worse. Saturday was sacred to that horrendous rite, inspection. A team arriving at the Point to engage the cadets, and starting for the field after luncheon would find the army squad lined up at attention with the rest of the corps, in agonized full dress, with some lieutenant colonel counting their brass buttons and administering a summary court-martial to a shoe shine not up to the specifications of the Articles of War. Often this ordeal did not end until within half an hour or fifteen minutes of game time.

At the beginning, the master of the sword, H. J. Koehler, had the job of coach wished on him. He did have the help at week-ends for two seasons at least of that great tactician of offense, Dr. H. L. Williams, who made the Minnesota shift famous. The date of the appearance of a trainer, Harry Tuthill, at the academy may be imagined from the fact that Tuthill landed the place through a skillful job of bandaging Ty Cobb's ankle.

Bill Edwards tells a story of Tuthill's arrival at the Point in his "Football Days". Tuthill knew nothing of football, but the army coach who chanced to see his expert ministrations to Cobb's foot engaged him on the spot. The innovation was pooh-poohed by the academy authorities. A trainer at West Point? Training, and nothing else but, was

what a cadet got from the day he arrived until he walked out with a second lieutenant's commission. One doesn't season lemons with vinegar. Ask the boys themselves whether they think they need any more training. Tuthill watched a dress parade, ending in a doubletime trot, while waiting to be introduced to the superintendent, but was not so impressed as he might have been.

"Glad to know you," the superintendent said, when the corps had been dismissed, "but I really can't see the need of a trainer here."

"Run them boys around again, then ask 'em to whistle," suggested Tut.

I had not been a month at Springfield before a letter came from Doctor Harper in which he said, "I have a very important matter about which I wish to talk to you. I am very anxious to see you at an early moment."

He saw me, and the important matter proved to be the University of Chicago.

We met in the breakfast room of the Murray Hill Hotel in New York. Dr. Harper then unfolded his plans for the University and broached the subject of my heading up the athletic department, first offering me a salary of $1500.00. The whole idea was new to me and I kept still and just thought. Dr. Harper did not wait long but said, "I'll offer you $2000.00 and an assistant professorship." Still I kept silent and thought. Decision and

action were dominant characteristics in Dr. Harper's make-up and probably thinking that the question of salary, which was furthest from my mind, was causing my hesitation, he enthusiastically burst in with "I'll give you $2500.00 and an associate professorship, which means an appointment for life." There is irony in the story of how this great university was conjured out of the raw Chicago prairie with Rockefeller money. There had been a University of Chicago, a Baptist school, from 1856 until 1886, when an insurance company foreclosed its mortgage on the plant. John D. Rockefeller already had amassed a great fortune; he was a devout Baptist and he was generous with causes in which he believed. The church had tried to interest him in saving the old university and had failed.

Meanwhile Dr. Augustus H. Strong was working on Mr. Rockefeller to give the fabulous sum of $20,000,000 to establish a great Baptist school in New York City. Rockefeller has given vastly larger amounts since, but $20,000,000 was a grotesque figure then. The doctor's eldest son had married Mr. Rockefeller's elder daughter. The doctor was three years older than the oil man; he had known him intimately and been his pastor in Cleveland. By now he was head of Rochester Seminary, the fount of Baptist orthodoxy. To all these advantages Doctor Strong added a masterful char-

acter unaccustomed to taking no for an answer. In the summer of 1887 he toured Europe as a guest of Rockefeller and talked his New York university daily, including Sunday. He wished $5,000,000 outright and $1,000,000 a year for fifteen years.

Doctor Strong never got his endowment or any part of it. Such a school was built in Chicago and he had no share in it, yet his long sales campaign had a profound effect on the destiny of the rival project. Mr. Rockefeller has given many millions to Chicago, but he began with no such thought. Doctor Harper hoped for a minimum of $1,500,000, but he dared not press for such a sum. Ten Baptist colleges between Ohio and the Rocky Mountains did not have an aggregate endowment of more than a third of that.

The original plea was for only $400,000, and the multi-millionaire balked at that. When Doctor Harper and Dr. Frederick Taylor Gates finally secured his first pledge in 1889 it was for $600,000, contingent on $400,000 being raised elsewhere; and that condition nearly wrecked the gift, for Chicago was engaged in raising $10,000,000 for the World's Fair. Yet ninety days after the condition had been met, Mr. Rockefeller gave an additional $1,000,000. By 1910 his gifts in cash and land had totaled $35,000,000. His imagination had been caught, and Doctor Strong's long and fruitless

campaign had prepared the soil on which Chicago's pleas fell.

Doctor Harper was doing a revolutionary thing, not so much in creating a great school virtually at one stroke, for that was being done simultaneously at Leland Stanford, Jr., University, but his was a new kind of school. Until the founding of Johns Hopkins, there had been no university in the United States and but one type of college. Chicago was to be a great experiment divided into the colleges, the academies, the graduate schools, the divinity school, the university-extension division and the university press, all to operate twelve months in the year. These last two and the twelve-month school year were revolutionary. Without exception, American colleges had confined their work to their own campuses. The successful extension work of Cambridge in England inspired Doctor Harper to reach out with lectures, correspondence lessons, evening and summer classes, publications and books lent from the libraries to a multitude who could not hope to enroll regularly. The curriculum was to be elastic rather than rigid. He disliked annual mass graduations; and had it been practicable, he would have provided for individual graduation, but this being too radical he compromised on quarterly graduations. And Chicago was to be coeducational, a further heresy, possibly the most scandalous of all.

Dr. Lyman Abbott once expressed it in these words: "The distinguishing characteristic of the German university is scholarship. The spirit of the English university is culture. President Harper built a university in terms of service. The older college of the English type produces gentlemen. The newer college of the German type produces scholars; and doubtless the University of Chicago has produced both. The scholarship which the first has regarded as a means and measure of self-development, and the second as an end in itself, the third has regarded as a preparation for active American life."

As a part of this new order of things there was to be a Department of Physical Culture and Athletics, the first of its kind on a parity with every other major division of the university, and the director not to be a professional coach under a temporary appointment who must win games to hold his job, but a permanent member of the teaching staff, of professorial rank. This was an immeasurable advance, and it was the place he offered me. At Yale, Jay W. Seaver had no powers and very few funds. Sargent, at Harvard, Director of Hemingway Gymnasium, a famous pioneer in physical training, had only a quasi-faculty standing. Everywhere except at Amherst, where the beloved Doctor Hitchcock held sway, physical training was a faculty Cinderella.

On November 25, 1890, I wrote to Doctor Harper: "After much thought and prayer I feel decided that my life can best be used for my Master's service in the position which you have offered."

Before I quit the East, I should touch on a phase of the game which I have neglected. Because I saw little of this side of the picture myself, I read into the record the testimony of a great reporter and a former Lehigh player, Richard Harding Davis.

Thanksgiving Day now was given over in New York to the big game. The city was joining in the noisy exuberance that once had only annoyed it. From 2000 or fewer the attendance had grown to 30,000, if you counted the thousands on Deadhead Hill, as Coogan's Bluff was known. The game, after much wandering between Hoboken, Berkeley Oval, Princeton, New Haven, Eastern Park in Brooklyn, and the old Polo Grounds at the north edge of Central Park, had been fixed at the field of the Manhattan Athletic Club, the site of the present Polo Grounds. From twenty-five or fifty cents, tickets now brought as much as fifteen dollars each from speculators, with boxes at $150, and tallyho seats at twenty dollars, if you reserved them a year in advance.

"After the game in the early days," Davis wrote in Harper's Weekly in 1893, the early days being the 80's, "all the students massed in Koster and

Bial's Music Hall, then in Twenty-third Street, and packed it so that after nine o'clock a man who wished to leave had to be passed over the heads of the crowd, and this the crowd would do for him with cheerful alacrity that landed him hatless and breathless in the lobby.

"The hall was very small, very dirty, badly lit and with a low ceiling, against which the smoke rolled and clung like waves to a shore. Below this, and on the single balcony that ran like a horse-shoe around the building, were more men than the floor could hold, and who overflowed upon each other's shoulders and stepped from table to table, or dropped from the boxes to the heads of the men below. These were all very young men, in what was known in those days as Newmarket coats and high, curly brimmed hats, and with silk kerchiefs bound around their necks inside the collars of these green greatcoats."

Yes, we were collegiate even in 1888.

"The silk kerchief was one of the fashions of that day, and it gave the unknowing the impression that every well-dressed young man of New York was suffering from a severe cold. These young men, whose garb made them look like an army of coachmen, hung three deep over the railings of the boxes, blocked the aisles, balanced and embraced each other on table tops, and stepped forth

from these unsteadily onto the heads of the crowd without exciting any ill humor on the part of the gentlemen so trampled upon.

"They yelled the entire time, and at moments of greatest enthusiasm clambered upon the stage and were pitched off into the arms of their companions and onto the heads of the frightened orchestra by the irate German managers.

"There was an attempt at a performance going on meanwhile, but no one noticed it; and on one night I remember the audience of more than a thousand students sang the chorus of one song throughout the entire evening in a monotonous roar that turned the stage performance into a pantomime. The actors came on and went off, embraced or fought or sang or danced, but it was as silent a performance as that of L'Enfant Prodigue. One could see the leader wave his baton and the actresses open their lips and the comedians fall down and get up again, but all one could hear was the audience shouting cheerfully:

They're af-ter me,
They're af-ter me,
For I'm the individual they require."

Davis moved down to 1893: "The collegians begin to arrive in town on Wednesday, and one sees nothing but young men enveloped in huge great-

coats and ulsters, with yellow shoes, and canes wrapped in ribbons. They make Broadway between the Fifth Avenue Hotel, where the Yale team lodge, and the Hoffman House, where odds are given and taken on the game, almost impassable. In the corridors of these two hotels men who graduated in the 70's are sure to meet men who graduated with them, and they gather here from Texas and Oregon with that fine disregard for distance that the Westerner soon learns, to talk football and wager large sums with total strangers who agree with them readily enough to leave as much as two or three thousand dollars in the hands of a man who also is a stranger to both. This man is Billy Edwards, an ex-prize fighter who keeps guard over the glassware at the Hoffman House bar, and who has become a most important figure in this great sporting event. He is the depositary of almost all bets, and gives nothing in return for the bundles of bills left in his charge but a piece of paper; and yet so great is the confidence in his integrity that he goes to sleep on the eve of Thanksgiving Day with as much as $50,000 belonging to men he has seen but a few hours before, and the faces of whom he has quite forgotten.

"Everything on four wheels that will hold twenty men on its top in the city goes up Fifth Avenue on Thursday morning. It is like a circus procession that begins at ten in front of the Fifth

Avenue and Brunswick hotels and moves continuously for three hours or more. Everything from the newest English break to ancient omnibuses, all draped from top to hub with festooned colors, is in the parade. Thanksgiving Day services in the churches have been moved forward that they may not interfere with the game. From Washington Arch to the layers of flats in Harlem, the buildings are draped in blue or orange or both. Blue banners with a white Y have been flung from the Vanderbilt and Whitney mansions; orange flags with a black P flutter from the mansions of the Sloanes, the Alexanders and the Scribners. The boots of the better breaks are apt to be stocked with bourbon whisky, vintage champagnes, sandwiches, whole cold salmon, roast chickens and chickens in jelly, for it is a long ride and the day is brisk."

The cheer leader already is on the scene. "It is interesting to note," Davis reports, "how systematically the cheering is given, how it is timed to destroy the effect of the rival cheering, and that certain men are selected to lead and give the time for these yells, something in the fashion of an orchestra leader. This year there was a new and unintentionally pretty effect in the introduction of blankets by the substitutes, in the place of sweaters. They found that it took too long to pull a sweater on or off. Every time time out was taken the subs

would swarm on the field waving their blankets like so many toreadors or Indians.

"Instead of two men from a newspaper, one to write the lead, the other to describe the play, every paper now sends the bulk of its staff. The sporting reporters, the best of the news staff, artists, photographers are augmented by ex-players of reputation, hired for the day to write signed reports and to make diagrams to show where the ball was every minute of the two halves and to denote who advanced it and who stopped it. At the last Thanksgiving game I helped to report for the Evening Sun there were seventeen men covering the game for our paper, and every one helped, from the proud reporter who came out on a coach and sent us word by a policeman that Chauncey M. Depew had just arrived, to the new reporter who raced five blocks after an ambulance to get the names of the wounded players whom he supposed to be inside, and which he found, on overtaking it, to be empty."

The university site was a rural scene when I first looked on it in the summer of 1891, stopping off at Chicago on my way to Lake Geneva. What became the Midway Plaisance was a strip of unimproved land just taken over by the park commissioners to join Washington Park with Jackson Park, where ground was about to be broken for the exposition.

The university site and many surrounding blocks were owned by Marshall Field, whose speculations in Chicago real estate were even more profitable than his great store. This land all was pasture surrounded by barbed wire. A swale ran through what became the quadrangle and on through the present athletic field. It still troubles us, recently forcing the sinking of sixty-four concrete piles to support the newest stand. Heaps of tin cans and other rubbish, dumped there for filling, marked the present quadrangle.

When I reported for duty in September, 1892, no building had been completed and the carpenters still were at work in Cobb Hall, the one structure nearing completion. We entered the building over bare planks, and in lieu of knobs on the doors, the teachers carried square pieces of wood to insert in the doors to turn the latches.

No one knew how many students to expect. More came than we looked for, but much more than half of these were women, theological and graduate students. The first recruits for the football squad were two boys who had just finished Hyde Park High School, a school that has sent us a continuous procession of football material. The two—one Harry Chase, a Chicago lawyer now, the other Cliff McGillivray, now dead—called on me soon after I arrived to ask about football prospects. When I posted my first call on the bulletin board

on October first for candidates to report at Washington Park, they and eleven other strangely assorted aspirants turned out. Some never had played, most of them very little; three were graduate and three divinity students well up in years; and all the other colleges in the Chicago territory had been practicing for nearly a month.

The squad was so weak that I had no choice but to play on the team, and on the baseball nine in the spring as well. There was no secrecy about my presence in the line-up, and no objection by our opponents. The game was too young and weak for such a situation to be thought particularly unusual.

Steigmeyer, '97, burst into verse on one occasion fitly to describe the situation:

Then Stagg was pitcher, catcher, coach, shortstop and halfback too;
For in those days of auld lang syne our athletes were few.

A week to a day after the first call we played the University of Chicago's first football game in Washington Park against Hyde Park High School, and won 12 to 0. Having no scrub nor freshman team, we were forced to get our practice in games and take on any team that offered. On the following Monday we beat Englewood

High School 12 to 6. The mounted policeman who patrolled the park was attracted by the game. He happened to be galloping along the sidelines at the moment I made a touchdown, and I still am accused of having used his horse as interference.

Wallie McCornack, from whom all football history at Dartmouth dates, was at half for Englewood, and already was a young man to keep both eyes upon. On defence I backed up the team from close behind the line and Wallie gave me a lively tackling practice. His green D sweater reposes in a glass case in the trophy room at Dartmouth, a symbol of the spirit of the man whose slogan was "The bigger they are the harder they fall," and a potent fetish for awed freshman aspirants to glory. I saw it when I was at Hanover in 1924.

Tuesday we played Hyde Park again; Wednesday the Englewood Y. M. C. A.; Hyde Park a third time the following Monday, and the Y eleven a second time on Wednesday. All were played and won in Washington Park, free to all who chose to watch. On October twenty-second we picked on someone our own size, playing Northwestern to a 0 to 0 tie at the old South Side ball park at Thirty-ninth Street and Wentworth Avenue. Our share of the gate was $22.65. I made a touchdown in this game, but the referee, an Evanston man, who had been helping coach the Northwestern squad, ruled that our center's head had been off

side and called me back. That was my first and last experience with an off-side head. When we met Northwestern in a return game on November second, we lost 4 to 6 on my failure to kick goal. Three days later we took on Lake Forest College, then larger than either Northwestern or Chicago, and tied 18 to 18.

Lehigh was to play Michigan at Toledo on November twelfth and the game had been heavily advertised. At the last moment Lehigh sent word that it could not come. Michigan wired us hurriedly to fill the date and we caught the last train that would put us into Toledo in time for the game.

Michigan had not bothered to change the advertising and the crowd did not realize that Lehigh was being represented by eleven impostors from Chicago until the second half. We lost 12 to 18, but made it interesting for Michigan and came home with $264 to reimburse our expenses of $217.

Michigan usually was supreme in Midwestern football, but this was Purdue's year. Snake Ames and Sport Donnelly were coaching, and that, with excellent material, produced a really notable eleven. We played them at Lafayette on November nineteenth on a guaranty of $225 and were annihilated, 0 to 38. Their bright line star was their center, Stevenson, an enormous fellow who broke up all our offense, by reaching over our center and pawing

our quarter when we had the ball, interference which the offensive side is protected against now. Jamison, left half, and Studebaker, of the well-known South Bend family, fullback, ran rings around us and completed our rout.

Two games with Illinois wound up our first season—the first at the Cubs' Park, which we won 10 to 4, and the second at Urbana, a 12 to 28 defeat. I scored the winning touchdown in the first game on a wide run. Before the return contest on Thanksgiving Day I sprained my ankle. Unable to play, I refereed at Illinois' request.

A vacant Saturday in November enabled me to referee the Wisconsin-Minnesota game at Madison, won by Minnesota 32 to 4. The first half was hotly contested and ended 8 to 4. Early in the second half the Wisconsin center broke a leg, and it was all Minnesota from then on. To check my memory I looked up this game in a history of Minnesota athletics. The final score is correctly, even flamboyantly, stated, but there is no reference to their opponents' ill luck or the closeness of the game until that mishap.

In politics, I have observed that our gentlemanly candidate always speaks to huge and demonstrative audiences, while two boys, a woman who turned out to be the candidate's widowed aunt, and eleven corner loafers yawned through the tiresome harangue of his unscrupulous opponent. This phe-

nomenon still is to be observed occasionally in partisan football reporting, but much less generally than in the 90's. Then the winner's and the loser's accounts of any given battle would persuade anyone that he was reading of two unrelated games.

Probably both Minnesota and Wisconsin had elevens much superior to ours in 1892, but not formidable by comparison with Eastern teams. The West inevitably was playing inferior football. The game was so new that it had not yet caught the public's interest, the gate receipts were trivial, and there were no prep schools and few high schools playing the game to feed the colleges with trained material. Our proximity to Hyde Park and other Chicago high schools where the game already was flourishing was a considerable aid in our early years, although many of the best of these high-school elevens were attracted to other universities.

Early in the season I posted a notice on the bulletin board asking for suggestions for a Chicago yell. The offerings were few and came in slowly, so I added two of my own composition. When we came to make a choice at a mass meeting, I wrote all the suggestions anonymously on a blackboard and tried each out, first with a selected group of powerful lungs gathered in the front rows, then with all on one side of the aisle, and finally, all present.

By a large majority the meeting voted for the war cry which we still voice:

Chi-ca-go, Chi-ca-go,
Chi-ca-go, Go!
Go Chi-ca, Go Chi-ca,
Go Chi-ca-go.

The author did not come forward to acknowledge his child and its parentage was unknown for a long time. When all then in the school had graduated, I broke down and confessed responsibility. I have read somewhere that the college yell dates from the intercollegiate boat races on Lake Quinsigamond near Worcester, Massachusetts, before 1870. In its primitive form, it seems to have been only nine rahs followed by the name of the school, and it was so universal that rah-rah boys was the current flippancy for students. Greek came into a greatly increased respect from the student body at Yale when someone discovered that Aristophanes had written a first-class war whoop in a chorus from the Frogs some 2000 years earlier, and it was adapted to old Eli's needs by adding Yale! Yale! Yale! at the end. Thereafter we bade defiance to the cohorts of Harvard, Princeton and way stations in accents of classic Greek, or classic frog, if that be more accurate. The Aristophanes-Yale yell runs:

Breka-ke-kex, ko-op, ko-op!
Breka-ke-kex, ko-op, ko-op!
O-op, O-op!
Par-a-bou-lu!
Yale! Yale! Yale!

This and Princeton's skyrocket, "S-s-s-s boom ah!" were, I suppose, the earliest breakings away from the nine rahs, followed soon by Cornell's original "I yell, you yell, all yell, Cornell." We gave the Aristophanes yell its full vowel sounds, and really simulated the croaking of frogs. Now they slur it until no one would recognize its origin.

A similar meeting to select a school color was not held until May 5, 1894. We had found that question all settled by the board of trustees when the university opened its sessions. The prairie from which the school rose was a mass of goldenrod, and the treasurer, Charles L. Hutchinson, one of Chicago's greatest civic leaders, had the happy thought of perpetuating the flower in the university's colors. Our first season we wore yellow stockings and a yellow U. C. monogram. The yellow ran, soiled easily and had a regrettable symbolism, which our opponents might not be above commenting upon. Maroon, apparently, was one of the few unappropriated shades in the spectrum, if it is to be found in the spectrum. Dr. J. E. Raycroft, of my department, shopped around the ribbon coun-

ters and brought a selection of maroon shades to the mass meeting. From the ribbons a choice was made and the baseball team appeared in its final games that season in the new school color.

In the group picture of our 1892 football squad, whiskers and mustaches grew almost as lushly as did the goldenrod on the Chicago prairie. Smith, at guard, now professor of chemistry at Lewis Institute, had an unrivaled hedge of black. Warhorse Allen, at tackle, wore a flowing mustache of the walrus school; and there were three lesser mustaches. The hirsute growth on their heads seems to have been normal, although this was the heyday of the chrysanthemum mop. That bizarre custom was defended as offering added protection to the head, but according to Parke Davis it was sheerly a fad growing out of a Princeton player letting his hair go uncut in the season of 1889 out of horseplay. Playing a spectacular game against Harvard, his flowing mane attracted so much attention that no player was held to be genuine the following season if he trafficked with a barber. The fad, Mr. Davis says, died almost overnight in 1895, when the Yale eleven startled Princeton by trotting on the field with decently shorn heads. However that may be, the mop survived until much later in the Middle West and did not pass into the football museum until the introduction of a simple type

of head protection, to which nose guards often were attached, about 1907.

Allen's first name was Charles, but few knew it, so general was the use of his nickname, "War Horse." He was a big, angular fellow of Irish descent, awkward looking in inaction, but far from awkward on the field, and the most spectacular linesman of our first four seasons. Once in a game Allen confided to me: "Amos, I've broken my nose." He wiggled it in his hands in proof. "But don't tell the boys," he added, and returned to the line.

No other player ever has called me Amos, though in my early coaching days I was Lon or Stagg to a few. To my face, I was Mr. Stagg; but about 1899 I began to be the Old Man when one student spoke of me to another. I was still a young man, even by a collegiate yardstick, and inwardly I resented the title. I find it quite satisfactory now.

Allen was a rough and hot-tempered player. When we divided the small squad into two depleted teams for practice, no one liked to play opposite him. Victor Sincere, now a Cleveland department-store owner, drew that unwelcome position one afternoon. Revolting against Allen's roughness, he smacked him. Discretion then asserting itself, Vic lit out down the field. The Warhorse followed, taking flying punts at Vic's retreating figure.

Next to the Warhorse, I valued the services of Andy Wyant, now a physician and staunch citizen of Englewood, Chicago, whose big haunch bones and bigger frame were rocks on which many an enemy ship split. The present dean of the Ogden Graduate School of Science, Henry Gale, was another member of that pioneer team. He was a freshman, tall, slender and weighing only 142 pounds, but bony and sinewy. He had played half back in high school, but I did not use him the first year in a game until the last one of the season, at Urbana. One of my regular tackles, a much heavier man, played so poorly in the first half that I sent Gale in in his place, and he charged with such fierceness and determination that he was a regular in the back field the next three years.

I did my best to develop a student pitcher for my first baseball team in the spring of 1893, but he was so wild in our opening game against Denison University that I, who had been catching, reversed positions with him and was forced to pitch the balance of the season. Varsity spirit was so low this first year that a group of students who had entered the new university from Denison, abandoned wife for mother, and rooted for their first love. Baseball ended with a deficit, $451 taken in and $689 out of pocket, and it continued to lose money, as it does in many colleges. This is due not only to the fact that the public will not pay to see college

baseball in competition with league ball but to a progressively diminishing interest among the students themselves as other sports came into competition with it. We no longer charge admission for baseball.

Every five years since 1910 baseball has boomed in prospect of the quinquennial trip to Japan of the nine. The four-quarter school year permits this to be done without scholastic interference, the players merely taking the quarter off in lieu of the usual vacation. The first junket resulted from the efforts of Stuffy Place, a brilliant baseball player who went to Japan as president of a missionary college and helped to coach the Waseda University team; and Fred Merrifield, now a member of the Chicago faculty, who had been captain of the 1899 nine, also had gone to Japan as a missionary and had become the first coach of the Waseda team. It was such a success that it has become a permanent institution, and already four trips have been made with return trips by Waseda.

For interclass play, regulation baseball has been superseded entirely by a game played out-of-doors with a large, soft indoor ball, with a remarkable increase in student interest. Competitive baseball really is a game for a few, demanding abilities which are not widely distributed. If the ungifted play, the game is slow and dull; while if only the skilful play, the bulk of the student body are shut

off from a fine exercise. The use of the big, soft indoor ball comes somewhere near leveling the poor player up with the good, and has saved the game for us.

The World's Columbian Exposition now was under way and the park upon which the university fronted had become the Midway Plaisance, the amusement sector. The first half of the name has stuck. It is the Midway officially, our telephone exchange is Midway; and reporters, panting for synonyms, long since fixed us as the Midways when the Maroons and plain Chicago grew blown from overwork.

The Streets of Cairo where Little Egypt danced the Hootchy-Kootchy impinged upon our ears, if not our eyes. The skirl of Turkish pipes, the rumble of Chinese drums and the cries of the ballyhoos mingled with the rasp and rat-tat of the saws and hammers of the carpenters still at work on the university buildings. The Ferris wheel went round just over the fence from the new dormitory for women, and the gifted Steigmeyer smote his harp again and sang:

Oh, there were more profs than students,
But then we didn't care;
They spent the days in research work,
Their evenings at the fair.

And life upon the campus,
Was one continual swing;
We watched the Ferris wheel go round,
And didn't do a thing.

CHAPTER IX

DEEP-DISH FOOTBALL

THE Army and the Navy played their annual football classic in Chicago for the first time, in 1926. One hundred and eleven thousand people, the biggest football crowd ever assembled in the United States, saw the game. The gate represented the sum of $653,000, some $150,000 more than the previous record, made I believe, in a California-Stanford contest. Our total receipts our first season of 1892 at the University of Chicago were about one nine hundredth of the amount of this one game. Our books showed $732.92 taken in, $633.33 paid out, and thirteen games played.

For ten years the university's athletics owed me money, a debt that fluctuated around $1000, until Mrs. Stagg despaired ever of having a bank account of our own. My salary was $2500 a year. Mr. Rockefeller gave to the new school with unprecedented generosity, but not even a Rockefeller's munificence was equal to the imagination of a William Rainey Harper. It was no fresh-water college he envisioned. Doctor Harper was the unusual

combination of a sound scholar and a born organizer, promoter and advertiser. In the 80's he had stirred up the whole country to the study of Hebrew. There is the measure of the man. One who could do that could do anything.

Then the panic of '93 tackled us low and accurately, and every dollar in the land hid out in bombproof dugouts. I was director of physical culture and athletics without an athletic field. At my urging, Doctor Harper made a request on Marshall Field in the spring of 1893 for the use of a square block of vacant land immediately north of the campus. Mr. Field cabled back on April third from Europe, giving us its use at a rental of one dollar a year.

We passed the hat on the campus then. The faculty and officers of the university contributed $490, the students added $281 and an athletic entertainment raised $95 more. Two lumber companies donated boards and posts. I hired one carpenter to put in the posts and stringers, while the students, headed by me, nailed home the boards and made a lark of it. We graded the uneven pasture, dumping the earth from a mound at the northeast corner into the low spot along Ellis Avenue, then sodded the infield, and I never labored harder on the Newark salt meadows.

Under forced draft, we had the field in reasonably playable condition by middle June, in time to

meet the University of Virginia 1893 nine in the first game of any kind played on what, since 1914, has been Stagg Field, but was for its first twenty-one years, by an inevitable pun on the donor's name, Marshall Field. I had promoted a college baseball championship series as an adjunct to the World's Fair. Virginia was one of the teams entered, and we beat them 8 to 3. The future Mrs. Stagg, then a freshman of seventeen, attracted from New York State by the fuss being made over this new coeducational university, was in the stands.

The first building on the campus, a contractor's shanty, became our dressing room. I bought it out of my own pocket and moved it on the field, the baseball season having ended with a deficit and left the cupboard bare. We sold advertising space on the inner side of the fence, picking up ten dollars here and there. Our customers had to stand until the spring of 1894, when we built a funny little bleachers that did not accommodate more than 150 persons. In the summer we added a grand stand, seating perhaps 1200. The gymnasium had been finished the previous winter. It was a one-story brick affair, so bare and graceless that it suggested a machine shop, and it had to serve as library and power plant too.

An Italian squatter had thrown together a shack on the Fifty-seventh Street side of the block for

CHICAGO'S HOME-MADE ATHLETIC FIELD, 1894

CHICAGO'S 1893 SQUAD

a lunch counter during the fair and had continued to operate it. I bought the shanty to get rid of him, intending to tear it down; but one of our engineers asked for the stand in behalf of his widowed mother, a Mrs. Ingham. We gave it to her, incorporating it into the fence, and she ran it for many years, making a good bit of money which she invested shrewdly in real estate. It was the "Shanty" to the University and became such a campus institution that now that it has gone, we reproduce it at each commencement and hold Shanty exercises.

That makeshift student-built fence had to serve for nearly twenty years, until 1913, and we made shift with the old gym until 1903, although the university required ten out of twelve quarters of gym work at a time when not half a dozen other schools enforced even dumb-bell drill. The new gym was worth waiting ten years for. It came as a memorial to Frank Dickinson Bartlett, a Harvard student from Chicago who died in 1900, from his father. There is a mural painting in the entrance hall by Frederic C. Bartlett, a brother of the dead boy, picturing single-stick and two edged sword contests. Over the front entrance a memorial window depicts the crowning of Ivanhoe by Rowena after his triumphs in the tournament of Ashby-de-la-Zouch, both subjects in harmony with the Gothic architecture of the building and the university.

Lack of money alone did not account for the modesty of our equipment. Low seating capacity was a settled policy of the university. For all his advanced views on physical training and his keen sense of advertising values, Doctor Harper shared the prevailing faculty fear of over-stressing competitive athletics as a public show. "It is not the function of the university to provide at great cost spectacular entertainment for enormous crowds of people," he read into the constitution, so to speak, of the school, and there it has remained.

The field had become an eyesore and a constant expense for repairs long before President Judson announced in 1912 the intention of building a permanent wall and grand stand within two years. Almost immediately the city condemned the bleachers, speeding up the program. The new grand stand was occupied partly for the closing game of 1912 with Minnesota, a 7 to 0 victory for us, and the rebuilt field dedicated at the opening game of 1913, which we won from Indiana, 21 to 7. A high concrete wall with a grandstand with a round, crenelated tower at either end, suggesting a feudal castle, inclosed the field. The permanent stands seated 8000 and with the bleachers and temporary stands brought our capacity up to about 20,000.

That 1912 capacity has been increased very slowly. We built, in 1926, a new concrete stand, seating 17,000, turning the field around and en-

larging our capacity to 48,000, but we continue in the rear rank of the Conference in accommodations. Ohio State has a great stadium that has held 82,000 spectators. Illinois' new stadium seats 69,000 and may be enlarged. Some 55,000 can watch a game on Minnesota's field. Michigan is increasing its capacity from 46,000 to 70,000, with possibilities of 100,000. Wisconsin already seats 45,000. Northwestern, which has had inferior accommodations, has a new stadium seating 55,000. Only Iowa, Purdue and Indiana are inferior to our enlarged field. These three, and all the others except Northwestern and Minnesota, are situated in small cities or country towns.

I confess that I do not subscribe to the wisdom of this university policy. There is no danger at Chicago of athletics getting out of bounds; that was taken care of at the outset by providing rigid faculty control and direction. The absence of a body of alumni was not an unmitigated evil. They were sorely missed in the 90's, but we escaped in our formative years that pressure to win games at any cost that alumni have been known to exert.

On the other hand, we are in the midst of a population of upward of 3,000,000, upon virtually all of whom we close our gates. There must be at least 50,000 graduates of other colleges in this great city, a fine body of men and women, most of them trained to enjoy watching college sports. We need

their friendship and we need the coöperation of all good citizens, but we have had little room on our field for outsiders.

For thirty-five years I have listened to faculty members argue that a student's choice of a college is not governed and infrequently influenced by the athletic prowess of the school—or, if he was so influenced, that he couldn't be much of an addition to the student body.

Yet this is demonstrably not true. We all love a winner. Not even a professional champion of lost causes can work up much enthusiasm over a college team that is trampled upon season after season. So long as a school plays fair in spirit and letter it is entitled to meet this demand. It is not necessary to cheat or to buy players in order to produce a team of which a school may be proud. A college with brains and courage, however small, does not need to hire a squad of mercenaries to wear its uniform.

Henry van Dyke, poet, æsthete, clergyman, diplomat, was not one, I take it, to be accused of gross materialism. I should imagine that most any college could use a young Henry van Dyke in its student body. Doctor van Dyke wrote an introduction to a history of Princeton athletics. In it he testified that he never had heard of Princeton until 1863, when, as a boy in Brooklyn, he saw the Princeton baseball team wallop the Excelsiors of Brooklyn

decisively. From that moment Princeton was his goal.

Big Bill Edwards tells in his book of coming to New York from a little upstate town to attend Horace Mann School, of seeing the drags filling in front of the Fifth Avenue Hotel for the Yale-Princeton Thanksgiving Day game, and of becoming so infected with the spirit of the scene that he walked straight to the nearest Y. M. C. A. and enrolled for a gym course.

When Harvard led the way by building her stadium, followed soon by Syracuse, then Yale and Princeton, there was a revival of faculty alarm, but nothing like the outcry that ensued when the stadium epidemic crossed the Alleghanies, and Ohio State, California, Illinois and others began to bake deep-dish football pies. As a people we are easily alarmed by mere size. Our excitement over the trusts a generation ago came in part of this distrust of anything larger than we were used to. The sound of 80,000 or more spectators paying $500,000 or more to see twenty-two college boys play a game for an hour was frightening to some minds. That was too much money, too many persons. Such figures are without precedent, therefore they must be somehow dangerous.

On the contrary, the results have been uniformly healthy. In those colleges where the faculties had shirked their responsibilities, the great income pro-

duced by stadia forced them to intervene and exercise the veto power when necessary. Most of the evils that have beset the game from time to time have been the direct result of student and alumni management, but the blame belongs on the faculty doorstep. The students and alumni ran athletics because the faculties had been too superior to concern themselves with such juvenilia. Their indifference was described, without overstatement at the time, as the crime of the faculties.

Someone has said that college football has become so highly profitable an enterprise financially that it would pay a man, willing to take a chance, to buy a small college outright and operate it as a cloak for his football eleven. With proper management, it has been argued, the promoter might expect to take in enough at the stadium gates on a few fall Saturday afternoons to pay the cost of running the school for nine months, and leave a handsome profit, a successful team, in turn, attracting an influx of new students.

There was a time when an enterprising J. Rufus Wallingford might conceivably have floated such a promotion, for the purposes of fiction at least; but the colleges are so generally organized now from one coast to the other in regional athletic associations, with strictly enforced codes of sportsmanship, eligibility and the like, that the outlaw school is near the end of its tether. Either it must

soon join the regional association and obey its laws or it will find itself without respectable athletic opponents. We have seen about the last of an obscure school going to sport-page glory in one season on the tails of a football team of tramp athletes hired in the market place.

We are not a people to sit idly by and see the Joneses put anything over on us. If Mugglesdorfer builds a stadium, should Siwash be denied? Not so long as good red American blood runs in Siwash veins and dollars in the pockets of the Siwash alumni. So the surface of these United States begins to take on a lunar aspect, pock-marked with craters that slumber or smoke lazily ten months of the year, then erupt in concert as Indian summer waxes. Perhaps we approach the saturation point, as they say in Detroit, but I walk warily in the paths of football prophecy.

What happens to the great surpluses rolled up by intercollegiate football? The money is being spent to enlarge the general physical, athletic and welfare programs of the colleges. The soundest criticism made of college athletics in the past was that a hand-picked few played and got the physical benefit of playing, while the bulk of the students sat in the stands and exercised their voices only. Now the intramural games program, taking in the entire student body, has swept the colleges and universities, and I hope soon will become gen-

eral in the high schools. They cost money and attract no paid spectators. They are possible, except in an occasional exceptionally endowed school, only because of the profits football pays in modern stadia.

An educator of national prominence assured me once that intercollegiate sports at Chicago would end with me. In 1912, President Judson, in opposing a new grand stand that would seat more than 3000, predicted that five years would see the end of intercollegiate athletics. Doctor Judson, I should add, changed his views radically after the war. On the other hand, there have been instances of college presidents of the newer salesmanship school so intent on booming their institutions that they have overruled faculty boards who were disposed to clean up the school's badly soiled athletics. Students are not fools. The faculty that winks at crooked work by a coach or student manager can save its breath in preaching ideals in the classroom.

I had most of my 1892 football squad back in 1893 and little new material, but I ceased to play. There were not 500 students in all branches of the university; half these were women and half the other half were graduate and special students who had put sports behind them. Some of my recruits sprang from unlikely sources, however. Ruhlkoetter at guard was direct from Germany with a

Weber and Fields accent, and never had seen a football until 1892. We dropped our high-school conditioning games and played Lake Forest, Northwestern three times, Michigan twice, Purdue, Oberlin, Armour Institute—just founded that year—and Notre Dame.

The second of the two Michigan games was played on Thanksgiving Day, and became the football fixture for that day and our big game, with one interruption, through 1905. Michigan withdrew from the Conference after the 1907 season and played a lone hand until 1917, and by the time it returned, the once-incidental game with Illinois had become the high point of our season. We had beaten Michigan in the first game, they won the second. Joe Flint, who had come to us from Princeton with a great reputation, was at halfback. He was out of condition and wore out in the first half. I had few substitutes, and was forced to send in a 128-pound youngster, Charlie Bliss, who played as obscure subs do in football fiction, but rarely on the field, electrifying the crowd by repeated brilliant runs.

C. W. Baird, a Michigan graduate, contributes an interesting statement in the Big Ten Weekly of February 10, 1927, which quotes him as follows regarding conditions at Michigan as late as 1893: "Seven members of the first football team that I managed in 1893 were not enrolled on the books

of the University during football season." This was before the Western Conference was formed and eligibility rules agreed upon. However, it is a striking illustration of the total lack of interest in and scrutiny of athletics on the part of the faculty. The condition at Michigan was duplicated in most colleges at that or earlier periods, but with the exception of my playing the opening year, nothing of this sort has existed at the University of Chicago, where from the beginning, athletics have been managed by the Department of Physical Culture and Athletics, with a Faculty Administrative Board. Playing ringers fell into three types: first, those who did not even take the pains to register for courses; second, those who registered for courses which they seldom attended; and third, those who registered for snap courses in some department where the work was easy and little or no work was required. There are no self respecting colleges now where the first and second cases can happen. There are still quite a number of colleges and universities where the third case can and does happen, but the formation of conferences where frequent and frank discussions take place, along with the passage of the one year residence and satisfactory scholarship rule, has tended to do away with this and all other unfair practices.

The alumni now are the most active agents in

developing athletic immorality, but they not infrequently have coöperation from the authorities of the colleges. In their anxiety to boom their institutions, the latter sometimes lend themselves to questionable coöperation, first, through the use of alumni secretaries and similar agents, working with the alumni or college for soliciting students, with particular emphasis upon athletic ability, and second, through the securing and application of funds for remission of tuition or scholarship aid. Not infrequently, these funds are contributed by alumni or other organizations for the use of athletes. Every now and then eruptions occur, like those at Dubuque College and West Virginia Wesleyan, where the president refuses to be a party to such practices. The recent action of the presidents of Dickinson, Ursinus, Muhlenburg, Gettysburg and Franklin and Marshall colleges, recommending the abolishment of so-called "athletic scholarships," indicates an awakening conscience to a much needed reform.

The third game with Northwestern was Chicago's first indoor football, played at night by electric light in Tattersall's Riding Academy at Sixteenth Street and Dearborn, on a tanbark floor 110 feet short in length and lacking 60 feet of the regulation width. We won 22 to 14. The contemporary newspaper clippings say that only 300 attended, but it was a sufficiently successful experi-

ment to be repeated several times. In defiance of the tradition that it is the ultimate proof of old age, I set down here that the winters in Chicago used to set in earlier and were more severe than now. The field was snow-covered so often that we sometimes marked the lines with lampblack, and even experimented with red-dyed whitewash. The severity of the weather hurt attendance and suggested indoor play.

The Notre Dame game was played on New Year's afternoon, also in Tattersall's. The South Benders brought along Lorin F. Deland's new and sensational flying wedge, but we broke it up and beat them 8 to 0 before a lively crowd of 600. The Deland wedge was the final outgrowth of the original V kick-off formation. The Princeton adaptation, wherein the quarter carried the ball inside a wedge made up of the other ten players, had been copied everywhere and pretty generally stopped in succeeding seasons. The earliest method of breaking it up was to dive under the ponderous slow-moving mass and trip it up. Heffelfinger, of Yale, who was six feet four inches in height, had his own method. He would leap high into the air and come down inside the wedge on the ball carrier. At one of my Sunday afternoon conferences with Camp, I suggested that we try putting two outrunners at the point of the wedge to block off the opposition's

guards, who were copying Heffelfinger's stunt. We tried it successfully for long gains.

Deland's contribution was the adding of momentum to the mass play. Parke Davis has written an excellent description of the play and its début. Yale opened the Harvard 1892 game in orthodox fashion, with the old Lehigh V. At the opening of the second half the Yale line deployed along the fifty-five-yard line in anticipation of a similar attack by Harvard. To the mystification of Yale and the crowd, Trafford, the Harvard captain and quarter, took position at the centre of the Harvard forty-five-yard line, while the remainder of the team divided into two sections of five each and fell back on the twenty-five-yard line on opposite sides of the field. Without putting the ball into play, Trafford waved his hand as a signal, the two sections came swiftly forward in lock step, converged around Trafford, who put the ball into play as they enveloped him, and the mass moved on with high momentum. Yale finally pulled it apart, downed Trafford on their twenty-five-yard line and won the game 6 to 0; but the Deland invention probably was the most spectacular single formation ever opened as a surprise package.

It was a great play when perfectly executed, but, demanding the exact coöperation of eleven men, extremely difficult to execute properly. Although

Deland failed to beat Yale with it, he changed football history.

By 1893 everyone was using his flying wedge and the mass-momentum principle, and the game so increased in roughness and injuries in consequence that the season ended in an uproar, and the Army and Navy Departments abolished the service game. The old Football Association was reduced, by now, to Yale and Princeton, and of little influence. The University Athletic Club of New York stepped into the breach and invited Harvard, Pennsylvania, Princeton and Yale to form a new governing body. All accepted, resulting in the most sweeping rules revision in ten years. The old Rugby kick-off was brought back from exile, the Lehigh V, the Princeton wedge and Deland's flying wedge were outlawed, and the teeth drawn from all other momentum-mass plays by prohibiting players on offence from grouping more than five yards behind the line. Since 1894 the rules have provided that the ball on kick-off, kick-out—abolished in 1914—or kick from fair catch must travel ten yards unless it is touched by an opponent, or it is not in play. Since 1922 a kick-off or free kick not going ten yards has been a loose ball, which the opposition is entitled to recover.

For all the reform, Harvard and Yale split over the bitter roughness of their 1894 game, Cornell restricted its football team to the home grounds,

and there was a public clamor for the complete abolition of all mass play. The 1894 rules body having failed to perpetuate itself, Moffat of Princeton and Camp of Yale joined in the spring of 1895 in inviting Penn and Harvard to take a hand in a new effort to save the now seriously threatened sport. The four colleges met and divided, Princeton and Yale for wiping out the mass play utterly, Penn and Harvard for retaining it. Penn, having just landed squarely on the football map by virtue of Woodruff's highly effective mass formations, was in the position of being asked to vote itself back into the minor leagues, or so it was felt at Philadelphia. The split was hopeless, and that season produced two independent sets of rules, one sponsored by Cornell, Princeton and Yale, the other by Harvard and Penn.

United, the Big Four stood; divided, they fell. They had bossed football since 1876, but now the colleges of the country revolted. In our territory, the presidents of Michigan, Wisconsin, Minnesota, Illinois, Chicago, Northwestern and Purdue met at the suggestion of President Smart of Purdue and took the first step in the direction of what now is the Big Ten Conference. The rules upon which this meeting agreed were not uniformly adopted, and a year later, quickened by criticism of Minnesota by Caspar Whitney in Harper's Weekly, Professor McMillan, of Minnesota, sent out an invitation to

the same colleges to confer again, on February 8, 1896. This time the vaccination took. The conference wove a pattern and blazed a trail that have been followed by seventy to eighty other regional athletic conferences which now blanket the country and include virtually every American school of collegiate rank, Yale, Harvard and a few others excepted. Iowa and Indiana were admitted to the Conference in 1899, and finally Ohio State in 1912 to make it the Big Ten.

Each year since then we have met to modify and enlarge the rules, to the incalculable benefit of the game.

The freshman rule, the three-year playing limitation and the abolition of the training table are among the reforms adopted first by the Conference. The first two have become all but universal, but Harvard, Yale, Princeton, Columbia, Penn and Cornell still maintain training tables and some of them training quarters. Faculty control of athletics is complete in the Conference and rather general throughout the country, but the old Big Four—Penn, Princeton, Yale and Harvard—still cling to graduate or student management, though with an increasing measure of veto power for the faculty. Where properly managed, there can be no objection to a training table, but it is too easy of prostitution into free board and room for athletes. I confess that I was opposed to doing away with the

training table, fearing for the physical conditioning of the athletes, but I have changed my mind. Looking back, I cannot see that its abolition has had the least effect on the conditioning of the men.

The revolt forced the rival rules bodies in the East to bury the hatchet and invite suggestions for reform. Agreement was reached on a new code in midsummer, 1896. The heart of the reform is found in Section E, which disposed of the mass play, it was hoped. It did help, but it was inadequate. It reads:

> No player of the side in possession of the ball shall take more than one step toward his opponent's goal before the ball is in play without coming to a full stop. At least five players shall be on the line of scrimmage when the ball is snapped. If six players be behind the line of scrimmage, then two of them must be at least five yards behind the line, or outside of the players on the end of the line.

This is explicit enough, and it has been strengthened since.

In 1903 the experiment was tried of requiring seven men on the offensive line between the two twenty-five-yard lines. In 1904 the scrimmage line minimum was raised from five to six for any point on the field, and in 1910 to seven, with the further provision that the one man who can be in motion before the ball is snapped must move only toward his own goal.

Yet the momentum play is a restless shade and stirs in its grave. The joker lies in the phrase "without coming to a full stop." That is a point capable of varied construing, and beating the rules with shift plays based upon momentum has not been unheard of in recent years. Dr. Harry Williams' Minnesota shift was the most famous of shift formations. Williams was a graduate of Yale of 1891. When the Minnesota shift was an old story in the West, he offered repeatedly to return to Yale and teach them the play; but Yale was not taking football lessons from a Western state university, an attitude which Harvard and Princeton were able to indorse enthusiastically. Heisman of Penn reintroduced the momentum principle when coaching Georgia Tech ten to fifteen years back, and the effectiveness of the Yellow Tornadoes was due in part to their emphasis upon shift plays that violated the spirit of the rules. Notre Dame overhurried their shift four or five years ago, to the indignation of Charley Daly, the Army coach. The referee ignoring his protests, Daly adopted the Notre Dame shift into West Point's tactics, which is what usually happens. We have been re-emphasizing the rule annually, and now in 1927, have set a measurement of approximately one second, or the time it takes to count 1, 2, 3, 4 fast, after a shift and huddle.

CHAPTER X

ADVENTURES AT CHICAGO

THE busiest of all my thirty-nine football seasons was 1894. We played eighteen regular games and four post-season contests —three in California, the first Eastern team to appear on the Pacific Slope. We lost to Wisconsin 30 to 0, held Iowa to an 18 to 18 tie, were beaten by Purdue 10 to 6, defeated Illinois by a like score, divided two games with Northwestern and lost our Thanksgiving Day game to Michigan, 4 to 6, on our failure to kick goal.

I originated the tackles-back play that season, and the innovation of having the quarter stand as he received the ball from the center. It not only saved the time lost in rising from a stoop but it minimized fumbles by permitting the quarter to use his body as well as his hands in taking the ball; better still, it enabled the quarter to get into the interference to greater advantage and made deception more effective. Credit often went astray in the 90's for new plays, due to inadequate reporting and the lack of contact between the sport of one region with that of another. For example, the textbooks

state that the turtleback play first was used in the 1893 Harvard-Yale game. This was a formation executed by massing the team into a solid oval against the tackle, and at the snap of the ball into the interior of the oval, rolling the mass around an end and unwinding the runner into a clear field. I had used everything but the name at Springfield, working such a revolving mass against both guard and tackle.

Frank Hering, now secretary of the Fraternal Order of Eagles, was my quarter in 1894, and the first man I ever encountered who could throw a football as a baseball is thrown, an ability arising from the unusual size and grip of his hands. I trained Hering, if he got the ball on the kick-off, to pass it out back to an end or a half or to shoot it to a sleeper lying outside.

Our football receipts had grown from $732 in 1892 to $2792 in 1893, to $5840 in 1894, but our expenses were keeping step, running to $4501 in the latter year. The balance was not such as to suggest an excursion to California. Several circumstances combined to take us there. Leland Stanford, Jr., University—opened in 1891 on the former Palo Alto stock farm where Senator Stanford had bred Advertiser, Sunol, Palo Alto, Electioneer, Arion and other great thoroughbreds—and the University of Chicago were the two youngest Universities in the land, only a year apart in nativity.

Stanford, coached by my old mentor, Walter Camp, had won the coast championship from California, coached by my old teammate and fellow townsman, Charley Gill. The two had drawn 11,000 to their game that season, charging $1 and $1.50, where fifty cents was the best we could do even for our Thanksgiving Day game with Michigan. And we could use the advertising.

President Harper was entirely agreeable, as he was toward anything legitimate that put the university's name in print, but he left it to me to find the money. I wrote a letter to the Stanford manager, who wired back an offer of $1000 guaranty and 75 per cent of the net receipts of a Christmas Day game. Nettled at the failure of other coast teams to coöperate in importing us, Stanford stipulated that Chicago should play no other game in San Francisco; but it appearing that the Reliance Athletic Club of Oakland had an option on the Haight Street ball park, the only desirable grounds, the Reliance Club was given a New Year's Day game with us. California also yearned for a slice of our carcass. I wired them to fight it out among themselves, and the eventual result was that we played Stanford in San Francisco on Christmas Day, again at Los Angeles in midweek, and the Reliance Club in San Francisco on New Year's, 1895.

The news that the Chicago team would spend

the Christmas holidays in California created all the stir that we had hoped. California was several times farther away in 1894, whatever the railway guide may say about it. In the first burst of congratulatory mail came a letter from a strange but well-disposed woman. She would be very happy to let us have the use of her private car, a buffet sleeper at the moment in the process of thorough renovation. The price would be purely nominal—something like $220, which I took to be mere interest on the investment.

I slept restlessly under the financial responsibility of the trip, and when I was not adding figures in my sleep, I was in the thick of scrimmage, for I had played daily in the post-season practice for the California games. Mrs. Stagg was awakened one night by the violent tackle of her head. I had dreamed that I was falling on a fumbled ball on the field. It is not unusual for a player to take the game to bed. Some twenty years later Coleman Clark dreamed that he was kicking off before a cheering throng, and sent his good right foot into the wall alongside his bed with such violence that he was on crutches for days. The oddity of Clark's dream was that the football season had been over four months, and he then was playing on the basket-ball five.

My knowledge of private cars was wholly academic; but I knew that they were vehicles of

princely luxury like steam yachts, and affected only by the greater actresses, touring millionaires and railroad presidents who rode free. I couldn't think of anything pleasanter than riding to California in one at any time, but most particularly at this time. I had been married on September tenth, and Mrs. Stagg's honeymoon so far had been spent on the university field. Now I should take my bride to Golden California in a palace on wheels. We accepted the offer gratefully. The newspapers dilated on our magnificence, while we stocked the car with sufficient food and drinking water to last the round trip, and found a competent chef.

These details were taken care of by others, and we saw the car for the first time when we boarded it in the yards. I do not remember whether the reporters saw us get away or not; if they did, they kept our secret and sent us away in glory. The car looked as though Sherman had just marched through it. It was a show car, a condemned Pullman that had been sold down the river in its old age to limp from siding to siding on the kerosene circuit, housing this carnival troupe and that minstrel company. The wheels were flat, the paint scabrous, the body humped at one spot and sagged at another. Vestiges only remained of the upholstery. The beds were bunks, not berths, and the first night out was explosive with the collapse of the uppers. The team was sleeping double before

we passed Cheyenne. Mrs. Stagg and I occupied what was facetiously known as the drawing-room.

The time was mid-December and the weather bitter cold crossing the mountains. In the middle of the night, on the top of the Rockies, I woke to hear that the car was afire. The coal stove at the forward end, becoming red hot, had ignited the woodwork. The train air cord ended with the car ahead of us, the rear flagman was away from his post and we had no way of signalling the train crew. While the train toiled upgrade, we fought the fire with axes and water and beat it after a blistering fight. Had the flames ever worked through to the outside, where the wind could have got at them, we either should have had to jump for our lives or have been burnt to a crisp, for the car was all wood, sun-dried to tinder.

Quietly, we wired ahead to the Pullman company to provide a standard sleeper at Sacramento and intern our car there until our return, so we rolled into the Oakland Mole in state. Christmas was a very handsome day by Chicago standards, but we were assured that it was unseasonably cold, and only 3000 sufficiently hardy spectators could be found to see us trim Camp's Stanford eleven handily, 24 to 4. Our share of the net receipts was $1099.35.

The fence around the playing field was about four feet high, and the ball bounded over it once.

Stanford had a five-yard start, but Ad Ewing, a hurdler on our track team, now an Episcopal clergyman, took the fence in his usual high-hurdle stride and captured the ball. Over the fence was not out in the 90's, and the referee did not bring the ball in when it went out of bounds. Whether it went out at the sidelines or goal lines, it was the property of the first comer. If at the side, it was in touch at the point where it crossed the line. The opposing team surrounded the point and the captain demanded, "What will you do, sir? Take it out or touch it in?" To take it out, the player walked in five to fifteen yards and put the ball into play in scrimmage. If he chose to touch it in, the two teams lined up at right angles to the sideline. The man with the ball touched it quickly to the sideline, usually after many feints, then passed it to one of his backs or ran with it himself. The in-touch play went out of use long before, but it was not formally abolished by the rules body until 1901.

Three years before, I had eliminated it, with much other obsolete stuff, from the Conference rules book which we issued, most of the changes being adopted by the Eastern committee.

When the ball was kicked or bounded over a fence, as happened occasionally, ludicrous scenes followed. Georgia and Georgia Tech were playing many years ago on a field surrounded by a perfectly

smooth fence fifteen feet high, and not more than twenty feet behind the goal posts. On a try for goal, the ball hit the post, bounded high and dropped out of sight over the fence. Both teams charged for the fence and fought frantically to get over it, but they dragged one another down faster than they could climb. While the fight raged, the referee, with the aid of the spectators, surmounted the fence and found the ball in a weed-grown ditch. He stepped back with a poker face and waited for the first player to come over the fence. Hands and an occasional leg appeared and disappeared, but after five minutes a Tech man came over the top with a Georgia man on his heels. Neither could find the ball. The third man over, Red Wilson, of Georgia Tech, discovered its hiding place and fell on it for a touchdown.

That and the game between Gettysburg and Franklin and Marshall, I think it was, where a drop-kicked ball struck on the chest of a policeman who had strayed inside the lines and caromed off and over the bar for a clean field goal, take high place in the comedy relief of football.

Stanford gave us a dinner at the Hotel Pleasanton after the game and both teams left for Los Angeles the following night in the hope of getting acclimated, but Stanford, the weather and Warhorse Allen's terrible energy combined to beat us 12 to 0. The day before the game I was called

away from a light practice. Allen asked a native how far it was to the Hotel Westminster, where we were stopping. The native guessed about a mile. "We'll run it then," said Allen, and led the way. The distance turned out to be three miles, and Allen, a horse for work, killed off the rest of the squad. The day of the game was hot and muggy, with a misty rain falling, which did not help matters.

The Los Angeles Athletic Club had promoted the match, and the receipts had to be split three ways, leaving us only $320 as our share.

We returned to San Francisco to be beaten 6 to 0 on New Year's Day by the Reliance Athletic Club, coached by Pringle, of Yale, giving Yale a tight little monopoly of coast coaching. Gale was out of the game, Herschberger folded up early and Ewing did not last out the game. All three were key men and I had to use three of my five subs. Our supply of home-grown water had been exhausted in fighting the fire on our sleeper, and the change of water, as we feared, upset the squad. The San Francisco papers commented unfeelingly that we were not used to water that we did not have to chew. In taking the American Olympic team to Paris in 1924, we were at pains to carry along a barreled supply of our best home water. In Paris, we decided to make a test of the water which the French so carefully avoid using internally. The

chemist found that the native water was several degrees purer than that we had painstakingly freighted across the Atlantic.

The greatest handicap an Eastern invader suffers on such a trip is the long layoff after the regular season's close, with training resumed in mid-December; but all these alibis and new ones are offered periodically by teams that journey 2000 or 3000 miles to take a licking on the coast. Syracuse was the victim in 1924, losing to the University of Southern California 0 to 16 at Pasadena New Year's Day. The following Christmas at the session of the Football Officials Association in New York, Chick Meehan, the Syracuse coach, spoke, comparing Eastern and coast football and reciting the difficulties of adjusting a team to the long trip, the sharply different climate, and the like.

When he had finished, Coach Zuppke, of Illinois, who was presiding, remarked, "Well, if I was coach of a team going to play in California, I wouldn't get off at any stops on the way to limber the boys up. I'd just get out as fast as I could and take my lickings and come back home right away."

David Starr Jordan had resigned the presidency of the University of Indiana to become head of Stanford when it was opened. At Indiana Doctor Jordan had filled in as professor of Ichthyology. It was his boast there that he knew and invariably greeted by name every student in Bloomington. At

Palo Alto it was noticed that although he had been there some three years now, he was content to bow only to the students. Someone commented on the fact.

"I gave it up," Doctor Jordan confessed. "I discovered that every time I remembered the name of a student, I forgot the name of a fish."

Our share of the New Year's Day game was $1398, and efforts to persuade the Native Sons and Daughters that photographs of the Chicago squad would make a handsome souvenir or den ornament, netted us just $2.35. Faced by a deficit we were glad to accept a guaranty of $100 to stop off in Salt Lake City and play the Y.M.C.A. The field was aslop with snow and slush, a miserable time was had by all, and the Y lost money. So did we, for our expenses totaled $3056, our receipts $2920. The deficit was charged to advertising, and was worth it, but I carried it.

Our sleeper, which we picked up clandestinely at Sacramento on our way home, was seventy feet long. The Southern Pacific's snow sheds had not been built to accommodate such ambitious rolling stock, and the car threatened to come apart all the way up the Sierras. The flat wheels grew flatter, until the railroad dropped us off like a load of ballast at Laramie and sent the car to the shops. While new trucks were being run under the senile sleeper, we went skating and jack-rabbit hunting. The

silver lining of the trip had been the art of our gifted chef; we had lived high. Returning with a bag of jacks, we handed the game over to him confidently. Unfortunately, neither he nor we were familiar with the high flavor and indestructible fabric of the species. With a splendid flourish he served us with Wyoming jack rabbit à la Macedoine. His culinary French was nothing less than inspired. If the original Macedonians were as hardy as this later species, no wonder Alexander conquered the world at thirty-two.

Clarence Herschberger was the first exceptional back and punter to appear at Chicago. He had made the team with a bang in 1894, his first season, but he was missing in 1895. His mother, alarmed at the injured roll reported by the newspapers, had refused to permit him to play longer. If he could not play, then he would not go to school, and Clarence took a vacation. On a hunting trip that fall he shot himself in the hand by accident. His mother hastened to lift her prohibition and he was back in '96, '97 and '98. Not since the World War have I lost a player or a potential player through parental objection to the sport. Parents do not fear football as they once did; neither, I suspect, do they speak with the old authority.

Carr Neel, a crack tennis player, joined the football squad in 1895. Neel had a floating cartilage in his knee, acting much as a cinder does in the eye.

Although floating cartilages are a common injury, Neel was the first man I ever saw who would call time in a game, drop on the ground, work his knee in his hands, then resume play. These floating cartilages are removed now by a simple and a common operation, but we were not sure then just what it was and we had a very vague idea of what to do about it. Our only remedy was a bandage to keep the restless cartilage in place. Neel and Bob Wrenn, of Harvard, fought it out for the National Singles Championship in tennis one season. Neel was leading in the fifth and deciding set when his return struck a loose ball on Wrenn's court. Under the rules, the point was Neel's, but he refused to accept it, and Wrenn won game, set and title by that margin.

A football team is made up of as many varied types and temperaments as a field of race horses. Two of the '95 squad, Ketman and Looney, suggest this aphorism. Ketman was a divinity student of superb build, weighing 196 pounds. Perhaps he was one of those men who dislike the game cordially and regret their size, playing out of loyalty or social pressure. I do not know as to that, but I know that I could not begin to get out of him the football possibilities in his physique. Looney was an intense, short-necked, bullet-headed little fellow of 150 pounds, but compact. He had little football experience, but better, he had football

imagination. Particularly on defence, he was an up-and-at-'em lad. Wherever the play went, he just had to get his hands on the ball carrier. Both he and Ketman were candidates for guard.

I had tried to teach Ketman how to charge at and under his man. He listened politely—and charged politely. I do not coax a player these days, but then my squad never exceeded twenty, and I coaxed Ketman. In the gymnasium I had tried the experiment of leaving the south 50 feet of my 250 feet of space with a dirt floor, to permit fielding grounders, shot putting, pole vaulting and jumping practice. This was the original embryonic gymnasium and field house combined. Rain breaking up football practice one afternoon, I took Ketman and Looney inside on the dirt floor and pitted them against each other in guard drill. I put Ketman on defense and tried to show him how to use his hands to stop Looney's charge, but Looney would get under the larger man every time, smack his head into Ketman's stomach and drive him back. Seeing that Ketman was getting restless under this treatment, I switched him to offense, but Looney got under him just the same. Perhaps I evidenced my despair. At any rate, Ketman rose from an undignified posture, fixed me with indignant eyes and said, "Mr. Stagg, I don't mind playing against a man, but I'm damned if I shall play against a goat."

CHICAGO-MICHIGAN GAME—1895

Photo. by Underwood & Underwood

A DIFFERENCE IN VEHICLES—1926

One of the most effective intermission appeals I ever heard was made by President Harper between the halves of the Wisconsin game that season. We were trailing, 0 to 12, at the end of the first half. Doctor Harper appeared in the dressing rooms while I was talking to the team. "Boys, Mr. Rockefeller has just announced a gift of $3,000,000 to the university," he said. "He believes that the university is to be great. The way you played in the first half leads me to wonder whether we really have the spirit of greatness in ambition. I wish you would make up your minds to win this game and show that we do have it." We won, 22 to 12.

Among our eighteen games in 1896 were the usual two with Northwestern, our local rival. The Methodists had Van Doozer and Potter, two famous halves, this season and they humiliated us 46 to 6 on our own grounds. A month later we beat them on their grounds 18 to 6. For five seasons Northwestern had been winning the first game and losing the second. Why not stop with the first game? some Evanston logician suggested. The following season we met once only—but we won decisively.

The loss of the first Northwestern game in 1896 was blamed in campus gossip on Nichols, our right halfback. He was charged with having presented two touchdowns to Northwestern, one by a fumble near our goal line, the other when he allowed the

ball to be taken from him on the kick-off in the second half. He was a fiery-tempered boy and so resentful of the hostility of the student body that only by the pleading of Trainer Max Beutner was he persuaded to put on a suit for the Illinois game the following week. Though he donned a suit, he wore a long overcoat, and sat in the grand stand, apparently a spectator. Halfback Coy, his substitute, had a shoulder dislocated early in the second half, with the score 0 to 0. Nichols threw off his overcoat and leaped into action. From that moment it was a different game. He gained at one end, then at the other. The tackles-back formation rolled Illinois backward now. Gardner, fullback, went over for the first touchdown, Nichols for the second. We won, 12 to 0, and Nichols was a hero again. In the return game with Northwestern he redeemed himself further.

Nichols was captain and pitcher of the 1894 baseball team, and all his playing years the Babe Ruth of Conference baseball. He was a first-rate pitcher, an extraordinary hitter and a brilliant fielder. Henry Spear in right field muffed an easy fly in a game on Marshall Field in 1894, recovered the ball and threw it to Nichols. The outraged pitcher hurled it back at him. There was a runner on third, but he declined to budge off base, suspecting a trick. Twenty-five years later, the championship baseball team of 1896 came back at com-

mencement to play the varsity 1921 nine, and Nichols, now in business in New York, smacked the first ball pitched for a home run.

With a steady rain falling outside, we played Michigan in comfort in the old Coliseum that stood on Sixty-third Street where the Tower Theater now is, on Thanksgiving Day, 1896. The papers were flippant, but the results justified us. Thanksgiving Day weather was almost uniformly vile and attendance accordingly reduced, while the Coliseum game drew a gate of $10,812, the largest on record in the West up to then. It was the first big game ever played indoors, with resultant publicity. By three o'clock it was so dark that the lights had to be switched on. The girders interfered with kicking near the sides of the field, the ball lodging in them once. We won, 7 to 6, on a safety and Herschberger's 40 yard drop kick.

Bobby Tooker, playing one guard for us, found himself against a phenomenon who had come up to Michigan from Albion College. He weighed 200 pounds and used them all on Tooker. Bobby rebelled and rammed his head into the pit of the giant's stomach. The latter gasped, then congratulated Bobby as one craftsman to another "That was a damned fine poke, young fellow," was his tribute.

The group which brought Chicago its first football championship in 1899 arrived on the squad in 1896. We had a trainer and a training table for the

first time this season, the latter by arrangement with a boarding house. In 1897 we rented the top floor of an apartment house and opened training quarters.

The group of which I speak was the wildest crew I ever skippered. The animal spirits which later helped to bring home the championship bacon were devoted in quarters to a continuous rough-housing that made life interesting for the other tenants. If you think the family upstairs in your apartment house is noisy, try living beneath a football squad. It was their playful habit to lean out the front windows and drop crockery bombs on the sidewalk behind passers-by to see them jump, what time they were not throwing food at one another. Jonathan Webb, solid, loyal, sober citizen and star tackle, being hit in the ear with a steaming hot potato, the most of which stuck there, refused to dig the potato out, although it was blistering that sensitive organ, as a lesson to his rowdy associates.

These exercises were not conducted in my presence, but I could picture them readily enough. I had a precedent to go by. When I waited tables in a student dining club at Yale, I had seen everything on the table, wet or dry, hot or cold, hurled by the diners at one another out of sheer good feeling. I recall one club member throwing a great dish of apple sauce at a fellow member and getting a large ball of butter, the common supply of the

table, squarely on top of the head in rejoinder. Harry Beecher usually started the fight, then ducked under the table when it was thoroughly under way.

Just such horseplay cost us the championship in 1897. We came down to the Wisconsin game undefeated, and would have won it, I am morally certain, but for the usual bantering and coltishness of the training table, over which Trainer Max Beutner presided. Herschberger and Captain Walter Kennedy, close friends, staged a contest to see which could put on the most weight at one sitting. They stripped and weighed in before the meal. Weighing out, Herschberger had gained seven pounds, Kennedy seven and a quarter. Whether piqued at this defeat or merely stimulated into further endeavor, Herschie next ate thirteen eggs at one sitting, was seized with gastritis just before the Wisconsin game, and was lost to the team. He was a key man both offensively and defensively, and I still am convinced that we were beaten 8 to 23 by thirteen eggs rather than eleven Badgers. We played Michigan indoors again on Thanksgiving Day in the old Coliseum and won 21 to 12, but the title had gone a-glimmering. Fifteen of these points came from place-kicks from scrimmage. I can not claim its invention but we were among the first to use it. Gordon Clarke held the ball for Herschberger's kicks, and the two became the most famous

place-kick combination in the game. Herschberger, a good drop kicker, had found that he could kick even more accurately from place.

The fields of football were infested with the boll weevil in 1897, for all the spraying and burning done in 1896. On October thirtieth Vonabalde Gammon of Georgia was injured in the Georgia-Virginia game. He had been a star of Glenn Warner's championship 1896 Georgia eleven. As he was being led off the field by McCarthy, who had succeeded Warner as coach, Kent, the Georgia captain, with no realization of the seriousness of Gammon's hurts, exclaimed, "You aren't going to quit, are you, Von?"

"I've got too much Georgia grit for that," the injured boy answered through clenched teeth, started to turn back and fell unconscious. He never spoke again, dying that night. The South was horrified, and the Georgia legislature, then in session, at once passed an act outlawing the game from the state. Only the personal intercession of the dead boy's mother with Governor Atkinson persuaded him to veto the bill.

The Conference season had been marred by no serious injury, but we acted without waiting on the always-tardy East, making our own revision of the rules. We were legislating for ourselves only, but we were accused of usurping the functions of the rules committee. Everts Wrenn—a well-known

Western official and a Harvard graduate—and others denounced our "impertinence." Wisconsin, having Eastern games on its 1898 schedule, became alarmed and withdrew its representative, Doctor Elsom, from our committee on revision. The rules body still was exclusively Eastern in membership, and Walter Camp now suggested that I be elected to the body in recognition of the Mid-West's growing football bulk. I was asked to confer with them at their spring of 1898 session, but baseball and track work kept me in Chicago and it was not until 1904 that I became a member, the first from a school west of Pennsylvania. I have served continuously since 1904, to become the senior member of the committee, which now is national in its scope.

CHAPTER XI

HEROES AND GOATS

TWICE tragedy has overtaken me on the football field. "Tragedy" is a big word, and if it seems to the reader too large for the deed, then our points of view are different. They were a major and a minor disaster, both involving the loss of an important game. The loss of a game, however much you wish to win it, is not tragedy, but the manner of your losing may well be. The lesser disaster cost us the Michigan game of 1898. The previous year I knew that Michigan had a potentially stronger team than mine, and planned accordingly. One move was to order my safety man to lay forward within ten yards of the scrimmage line to bolster up our defense. I took the chance, knowing that Michigan would not expect us to leave our safety spot uncovered and be prepared with a quick kick to take advantage of it. The plan worked and we won, partly by means of it.

It was purely a temporary shift, ordered to meet the special circumstances of that one game; but against Beloit, early in the '98 schedule, I saw my

safety man edging forward. While he was absent from his post a Beloit runner got loose and was stopped only on our three-yard line. I rebuked my man kindly, reiterated the temporary purpose of the change in position in the Michigan game, and believed that the close shave had driven home the lesson.

We made our first invasion of the East several weeks later to play Pennsylvania. Again I stood helpless on the sidelines and saw my safety man working his way forward, perhaps unconsciously. He was out of position when Woodruff uncorked his delayed pass. Penn scored a touchdown as a result, overtaking us, to pass us and win in the second half. Between the halves I upbraided the safety man with a righteous indignation and warned him never again to desert his post under any circumstances.

We came down to our annual Thanksgiving Day game with Michigan, unbeaten in the Conference. We had the better team this season—should have won and would have won. A third time I stood transfixed on the sidelines and saw my safety man creeping steadily forward. The Beloit contest had been a minor game, the Penn pill had been bitter, but Michigan was our great rival for whom we pointed all season, and the championship was at stake.

With the safety post deserted, Widman, of

Michigan, popped suddenly out of a mass play with the ball and was off. Two of my men spotted him, broke loose from the tangle and gave chase. Either should have stopped him, but they waited too late to dive and he outfooted them, a blunder that seldom would occur in this day of greatly improved tackling. Captain Kennedy saw the flying Widman a moment later, spurted magnificently and overtook him, but too late. Widman was on our three-yard line as Kennedy dived, and the momentum carried both over for the touchdown that won the game and championship for Michigan by a single point. We had outplayed them consistently, and Widman's forty-five-yard run had been a sheer gift.

The safety man was a star. He had played well and loyally for four years, and this was his last season and his last game. Most coaches would have rawhided him, I suppose, but the milk was spilled. I never hesitate to jump on a man with both feet, figuratively, if I can accomplish anything by doing it; but I said nothing, and have not spoken of it for thirty years until now. He, of course, knew what he had done and how inexcusably he had done it; so did all the team; but the reporters did not sense the facts and I print them now for the first time.

I do not know yet whether he thought he knew more than I did, or whether his zeal and impatience

at being out of the picture drew him forward automatically. It illustrates the necessity for a military obedience on the football field. A player must obey orders like a soldier where orders have been given, and, like a good soldier, act swiftly and surely on his own in an unforseen contingency.

At five minutes past ten every night, the year round, the chimes in Mitchell Tower, directly across from our gymnasium, sound a special cadence. Few in the university know that they ring thus because of the second and greater tragedy, which occurred in another Michigan game. At Monday practice before this game I caught a serious cold. Tuesday morning I was so ill that I said to Mrs. Stagg, "I'm afraid something will happen to me if I turn out this afternoon, but I've got to go." She protested with all the authority a wife can command, but I went. By the day of the game I had an abscess in each ear, both needing to be punctured, influenza had developed and pleurisy and pneumonia were coming on. That morning the skies dumped fourteen inches of snow on the field, although none fell eight miles away on the North Side, and we had to muster an emergency crew to clear the field. I was driven to the game and onto the snowy field in a carriage, in fearful pain from my ears and a sinus headache—two of the most exquisitely painful aches, it is said, to which man is

heir. I was swaddled in bedclothing and Mrs. Stagg sat beside me as nurse.

To this physical torture was added a worse mental agony when I had to watch two of my team side-step plays repeatedly. Yost had turned out another of his great elevens and we could not have won; but for the first and last time on any field, I was disgraced. Not even the brilliant work of Eckersall could obscure that. Willie Heston ploughed through these two, but not through Eckersall. He leaped clear over Eckie's head on a tackle once, but the boy was up like lightning, reversed, overtook Heston in twenty yards and stopped a touchdown.

I came down with pneumonia after the game, my mental depression offset the staunchness of my body, and I came very close to death. I was sufficiently convalescent before Christmas to go to Chloride, New Mexico.

I made the foolhardy mistake of remaining only seventeen days in New Mexico, and hurried back to my job before I was well—an excess of zeal that I am not yet done paying for. Brooding during my convalescence over the disgrace that had come to the university under my ægis, I thought back to the chimes in Battell Chapel at Yale, of how effectively they had spoken to me in Yale's behalf, and of how I had gone to bed every night on their chiming ten o'clock.

The pair had quit under fire, but I was their coach. Both had broken training rules, I was certain, and had been out of nights, with consequent lowered physical condition that probably accounted in part for their lying down under a pounding; but what of the coach who had let such a crop come to harvest? I grew more and more morbid in my weakened physical state, and I knew my first peace of mind when I had the inspiration of giving $1000 toward the installation of chimes in Mitchell Tower, a copy of the Magdalen Tower at Oxford, which stands across from Bartlett Gymnasium, a memorial to Alice Freeman Palmer, former president of Wellesley and the first dean of women at Chicago.

As a condition to the gift, Mrs. Stagg and I stipulated that a special cadence be rung nightly at 10:05 o'clock for the better emphasis of our purpose. It was our hope that the bells might have for the student body of Chicago the emotional value I had taken from the Battell chimes at Yale, and that they might speak with a greater eloquence than a coach could hope to do of the ideals of the university's athletics as they sounded a nightly curfew to the men in training.

Our '98 team was distinguished for a number of things, the least of which was that it was Chicago's first wholly smooth-shaven squad. Burchard, at guard in 1896, a graduate student, fat and well

beyond the normal college football age, had rubbed the dirt of many a field in a coal-black and bushy beard that would not have dishonored a Russian muzhik. Our last mustache bloomed in 1897. When Harvey Fox arrived on the squad that season, bringing with him a pair of burnsides, the tide had turned forever against such manly adornments. Failing to persuade Fox that his burnsides were a blot on an otherwise pleasant landscape, some of his mates enticed him one night to the home of his cousin, Henry Adkinson. As he entered the door, Harold L. Ickes, a Bull Moose leader in 1912, tackled him smartly, while Adkinson and one other leaped upon his shoulders. They trussed him up to an ironing board and shaved off the right burnside, Adkinson wielding the razor.

The mustache has not returned to Chicago athletics even in the bobbed form; but in the spring of each year the school barber fires a pistol, thereby starting the annual mustache race for seniors, with a suitable prize for the lushest growth by commencement.

I saw Yale play Harvard in New Haven in 1898, the first time I had seen a Yale eleven in action since I had come West, and the last. I went back with high expectations, looking for pointers, and suffered a great disillusionment. Yale was beaten 0 to 17, Diblee, captain and left half of Harvard, running wild simply because the Yale ends played

so far out from the tackles. I shall attempt no invidious comparisons, but never since have I stood greatly in awe of the Atlantic Seaboard brand of football. In 1916 Tad Jones invited me to return to Yale to help out in the first week of practice. As we are not permitted to begin practice until September fifteenth, while Yale turns out on the first, I was enabled to go, but I saw no games, of course.

Knox College, of Galesburg, Illinois, was a newcomer on our 1898 schedule. George Fitch had graduated there the previous year. Knox is presumed to have been the original of his Siwash, so we may have played against Ole Skjarsen all unwittingly. Football has all the materials of drama in generous proportions, but except for Fitch's burlesques, fiction has done very poorly by the sport.

There is, of course the perennial story in the November issue about the despised sub who is sent in in the last minute to play because the coach has no one else left, and— But you know it.

We lost only two games in 1898, the first to Pennsylvania, as hereinbefore related. That fine strategist, George Woodruff, was at the top of his form at Penn, but we had a trick or two up our own sleeves. We scored first on a fake place kick, my invention. This has been a touchdown getter and still bears fruit. In 1894 I originated a fake

kick-off, recovered by ourselves. The rules, as now, prescribed that the ball must travel at least ten yards on the kick-off. As we worked it against Michigan in 1894, Warhorse Allen was stationed alongside the ball. The pretended kicker charged forward as if to drive the ball straight ahead as usual; but just before he reached it the Warhorse kicked it gently, at an angle. Herschberger recovered it on the bound about twelve yards ahead and near the sideline, and dodged his way through to Michigan's twenty-yard line.

Four years later we worked a variation of the same joker on Penn, Herschberger kicking the top of the ball lightly and recovering it himself after it had travelled ten yards forward. With the ball still in our hands, we rang another change to a pretended place kick, and went around Penn's end for a touchdown. From time to time I have used all these tricks with telling effect, and they long since have been adopted generally. We planned to use my 1894 kick-off again against Illinois in 1914; but two of our team lost their heads and failed to get into position, and the captain's efforts to straighten them out tipped the play to the alert Illinois eleven. Worse followed. When we switched back to a true kick-off some of the Chicago team failed to return to place, leaving a commodious lane, through which Pottsy Clark, now assistant coach at Minnesota, ran for a touchdown. Clark

was the hero of the day, and I would detract nothing from his glory, but our own dumbbell playing had something to do with it.

We took it out of the storehouse and dusted it off again for Wisconsin's benefit in 1925. Kernwein recovered the ball and made a long gain, only to be called back, properly, when the linesmen checked up. He had misjudged his distance and caught the ball only nine and three-quarters yards in advance of its kick-off position.

We had better fortune with another trick kick which could be used on any punt. The rule was changed in 1903, but before that a punter could recover his own kick if the other side permitted him to do so. The rules specified only that the rest of the offensive team, being ahead of the ball, were off side and could not recover it until it had been touched by the defense. Secure in this knowledge, the defensive line would lose interest once they had failed to block the kick. Herschberger would come forward rapidly underneath a high punt. Twice in one Northwestern game he caught their backs napping and recovered his own kick, and he worked it successfully other times.

That disregard for tradition of which I have been accused led me to put Walter Kennedy, fast and weighing 195 pounds, at quarter in 1898. He had played tackle and half his two previous seasons. It was axiomatic that quarterback was reserved for

the lightest man on the team. There may have been a good reason for the tradition once, but as is frequently the case with traditions, the times had changed. I had a good quarter in Gordon Clarke, but I could use both speed and weight in the position. The innovation was much talked of West and East. Woodruff followed suit at Pennsylvania and shifted John Outland from tackle to quarter and Purdue moved its heavy captain to quarter.

As early as 1896 I had shifted our defense from tackle supports to putting the backs directly into the line as smashing halves and closing it up tightly, with only two men, the safety included, for secondary defense. This became commonplace in the West; but in 1902, before the Northwestern game, George Foster Sanford direct from the East, who was taking a fling at coaching a Western eleven, predicted what would happen to our unsupported line. We beat them 12 to 0.

Against Penn in 1898, I played a sort of trapezoid box defense by bringing my smashing halves back and close behind our defensive tackles whom they catapulted headlong into the guards back interference and then shifted behind the line with the play. Penn was stopped cold in the first half.

In 1899 we came into our first championship. Playing eighteen games, we won sixteen and tied two, both the Iowa and the Pennsylvania contests ending 5 to 5. Between October fourth and four-

teenth we played Notre Dame, Iowa, Dixon College and Cornell. The latter was our first with the Ithaca school, coached that season by Percy Haughton, and we won 17 to 6. We beat Brown, Northwestern 76 to 0, Minnesota 29 to 0, and Wisconsin 17 to 0 in a post-season game.

The Penn game was played in Chicago this time, and they sent Jack Minds, an assistant coach, on ahead to spy out the landscape. I suspected nothing of this; but having a new portfolio of tricks in preparation, I didn't uncover them on our own field, which was open to any eye. Minds happened to arrive just as we were leaving in livery rigs for a ball park on Sixty-seventh Street, and he fell in behind. He told me later that his arrival was providential and that our artifices would have worked havoc with them had they not been prepared; but in my judgment we failed to win by the poor judgment of our quarter, who made the error, all too common with quarterbacks, of assuming that a straight line necessarily is the shortest distance between two points in football. We would make long gains on off-tackle plays, through the brilliant slashes of Ralph Hamill, march down on Penn's goal, then try to hammer our way through the strongest point in the wall—the center of their line, where the great trio, Overton, Hare and McCracken presided and lose the ball on downs. Someone on the Philadelphia coaching staff told me that

they had left an apparent hole between center and guard as bait for our quarter, but that may be only a good story.

We had a guard that season—Herb Ahlswede, now of Long Beach, California—who broke a leg in practice two days before a game and played it through without realizing his injury. At Ahlswede's tearful pleading to play, Dr. Raycroft, who possessed the spirit of the pioneers, for he had played quarterback on our 1892 team, worked most of the night to devise and get made in time a boot and pad that would permit him to play. A shoemaker and blacksmith finally succeeded in building a sole leather extension on his shoe, braced with an iron which went under his instep and up the leg almost to the knee. A horse's fetlock pad protected the fracture. It was the only case I know where a player started and played through a game with a broken leg. An X ray later showed a very good union to the long, diagonal crack in the fibula.

The X ray was the newest scientific quirk in 1899. In 1897, Herschberger had hurt a foot in the Illinois game and the device, worked by Professor Michaelson, the distinguished physicist, had demonstrated that the bone was not broken. This is said to have been the first time the invention had been applied to a football injury. Today, at the least indication of trouble, we hustle a man to the X ray.

A newcomer, a slight tow-headed lad, weighing only 145 pounds, appeared on the squad that season and caught my eye at once by his fierce and accurate tackling. His name was Jimmy Sheldon, and he was one of those cat-at-a-rat-hole footballers that gladden a coach's heart. He was captain in 1901 and 1902, by which time he was up to 158 pounds—still slight enough; but it isn't beef that makes a player, as any coach will tell you. He was my assistant in 1903 and 1904, after graduation, then went to Indiana as coach for nine years.

In his last year at Indiana I was leaving the White Sox baseball park one summer afternoon after a game when I saw Jimmy standing on a Wentworth Avenue corner, waiting for a street car. He had just lighted a cigar when he caught sight of me. I glanced away intentionally, but out of the corner of one eye I saw him drop the cigar quickly and step on it. Then I laughed at him.

Like many other old boys of mine, he couldn't smoke and be comfortable in my presence, even after the lapse of years.

James Weber Linn told a similar story about Johnny Breathed in his Chicago Herald and Examiner column. Breathed had made his letter in track, but a bad knee kept him out of football. Back from a year in France, where he had served as first lieutenant in a combat regiment, Breathed borrowed a cigarette on Stagg Field from Linn.

"He was a hard-boiled lad," wrote Linn, "and the five years since his graduation and the war had not noticeably softened him. He had just lighted up when he dropped the cigarette unobtrusively and stepped on it.

" 'What's the matter?' I asked. 'Don't you like my brand?'

" 'Sh-h-h!' whispered Johnny. 'There's Old Man Stagg behind you.' "

In 1898, Michigan, Illinois and Chicago had boycotted Wisconsin because of their playing of Maybury and Cochems, alleged to be professionals, and two rival Conference field meets were held in the spring. Wisconsin barred the two players early in the fall and the hatchet was buried, but in 1899 the boycott was turned on us. Wisconsin, Michigan and Illinois, all located in relatively small communities, accused us of running things with too high a hand in demanding that all our games either be played in Chicago or we be given a guaranty large enough to compensate us for playing away from home, together with a return game at Chicago with the same guaranty for the visitors. This policy was a necessity with us, dictated by self-preservation. All our athletics depended upon football receipts; we had no alumni to meet an athletic deficit, and we were located in a great city which would outdraw Ann Arbor, Madison and Urbana-Champaign many times over. The boycott ac-

counted for Brown and Cornell's appearance on our schedule for the first time, and we made considerably more money than ever before.

The story of how we came to play Wisconsin in a post-season game for the championship never has been told. Both teams were undefeated and the Conference was rife with argument as to which was the better. A friend of Chicago's asked me if we would like to play the Badgers, and got a loud affirmative. He approached a Wisconsin alumnus, who also wished to see the teams meet, and together they arranged a luncheon for some ostensible purpose other than football. Both Wisconsin and Chicago men were invited, and when they were seated, the two conspirators fell into a dispute as to the relative merits of the two elevens. The argument spread rapidly and engendered some heat. When it was thoroughly ripe the Wisconsin member of the conspiracy innocently suggested: "You can't win football games over a tablecloth. Why don't you get your two teams together and fight it out?"

"Stagg will play, but Wisconsin can't be smoked out," retorted his accomplice.

Smarting under this false implication, the Wisconsin faction brought pressure to bear on Madison and Professor Van Hise, afterward president of Wisconsin, and Manager Fisher of the Badgers met me in Chicago and arranged a game at Madison on December ninth, which we won, 17 to 0. One

of the group pictures of the '99 eleven, I note, displays a badger pelt. The boycott never was resumed.

Hiram Conibear, who later went to the University of Washington as rowing coach, revolutionized American rowing, made the Washington crews supreme and became a famous figure in that sport, was our trainer in the late 90's. Captain Kennedy was kicked in the head in the Wisconsin game and Conibear ran onto the field to attend him. Kennedy apparently was not badly hurt, but Conibear knew that a player may be badly dazed, yet appear to be in full possession of his faculties. Games have been lost by failure to detect this condition and Con had a test he always applied.

"What's your name?" he demanded of Kennedy.

The big captain looked the trainer in the eye in astonishment, while Conibear peered back anxiously.

"Go bury your grandmother, Con!" Kennedy said, after a moment.

"You're all right, Ken," the trainer pronounced, and ran off the field.

We had won the Western intercollegiate track championship in 1899, and in 1900 I promoted a trip to the Olympic Games at Paris. I had to borrow $2500 at the bank to finance the trip, President Harper and T. W. Goodspeed, secretary of the university and perhaps our most enthusiastic rooter,

indorsing my note. I took five men: Charley Burroughs, a great sprinter, who died of typhoid in Paris later while doing postgraduate work; Bill Maloney, an unusual quarter and half miler; his brother Fred, a hurdler of parts; Harvey Lord, a quarter-miler; and Henry Slack, a 220 and 440 yard man.

Before we sailed we learned that all the Olympic finals were to be run off on Sunday. The trip was off. Together with Princeton and Syracuse, we withdrew. A few days later a cable came from Paris to the effect that the French would defer to the peculiar Sabbatarian sensibilities of America and shift the finals to a weekday. Once in Paris, and with four of my five men qualified for the finals, I discovered they were to be held on Sunday after all. We were staying at Versailles with Mike Murphy and his Pennsylvanians. Princeton, Syracuse and Chicago refused to compete and Mike came home with all the loose statuary in Paris.

For years I was bitter over the inconstancy of the French and held them lowly as a people. In Paris again in 1924, I encountered Spaulding de Garmandia, a former rackets champion, tennis sharp, crack baseball player and all-round amateur athlete with whom I had played on the Bergen Point baseball team in the 80's. De Garmandia had gone to Paris as assistant to A. G. Spalding, Director of Athletic Sports, for the United States at

the Paris Exposition of 1900, and had remained in France. I had luncheon at his home. We talked of old times.

"Do you remember the row about the Sunday finals at the 1900 Olympics?" he asked. I did. "You know," he went on, "I couldn't stand by and let things go to smash, so I sent that cablegram on my own authority, hoping to make the French see the light before the games."

I publicly apologize to France.

The group which had come in in 1896 and brought us the title in 1899 was graduated after that season, and in 1900 and 1901 we had two of the weakest elevens in our history. Again in 1910 we had such a slump, following the wholesale graduation of a good team. I tried to meet this weakness in part by drilling the squad by the hour on their knees, their bellies, all fours, rolling over and getting up quickly, to teach them where the ground was and what it felt like. Five yards was not much to make in three downs, and on defense the only way to keep the other fellow from making it was to get down, then get down lower. When the linemen failed to perform to suit me, I made them crawl eighty yards on their knees.

We tied Minnesota 6 to 6 in 1900, Jimmy Henry, now general manager of all the National Biscuit plants in Chicago, our left half, saving us from de-

feat with a seventy-five-yard run for a touchdown; a gallant dash, all the finer in that Henry had a broken hand.

Despite our weakness, we beat a good Michigan team 15 to 6 in the final game of the '00 season. I had gone to Ann Arbor to watch the Michigan-Ohio State game, which ended 0 to 0, and see what I could see. Biffy Lee, of Princeton, was coaching the Wolverines. I thought I saw a weakness in his defence, and on the train coming home I devised a play to take advantage of it, putting a pusher behind the fullback in a drive on center and off tackle. Bodwell, a Kansas farm boy, weighing only 150 pounds, was at right guard for us. Kelly, a 220-pounder, would oppose him. Before the game I asked for volunteers to play against Kelly, and Bodwell was the first to offer.

I had intended using him anyway, but I wanted a line on his mettle. He fought Kelly to a standstill.

They were betting at Ann Arbor that Michigan would beat us 40 to 0, but the new play did what it was designed to do. Ernest Perkins at fullback was the hero of the day. The reporters christened it the whoa-back. I never have understood the title, but it sounded well.

The Chicago Press Club gave a dinner to the representatives of the Big Nine following the sea-

son of 1902. Chief of Police O'Neill appeared suddenly and demanded the immediate surrender of A. A. Stagg.

"What is the charge?" the toastmaster asked.

"I have a warrant for Mr. Stagg on the charge of leaving his whoa-back unhitched in the street," the chief shouted.

The whoa-back is only one of a procession of curiously named plays, some of them descriptive. In the play variously known as the Statue of Liberty and the cherry picker, a back held the ball aloft in his hand as if for a pass, another player came from the side, lifted the ball out of the upraised hand and ran with it around the opposite end. I used it against Cornell in 1908, its first employment by a Conference team. Zuppke's flea-flecker was a triple or quadruple pass, if I remember aright. I have forgotten what the octopus was. The tower pass was a Mutt-and-Jeff play. Two players, one tall, the other short and slight, dashed behind the enemy's goal line, the tall man lifted the little fellow in his arms, and little Jeff received a forward pass, sent high over the defensive team's heads.

The talking play has taken many forms. It usually has been reserved for goal-line use. In one form, as the quarter calls the signal someone on the team shouts "What's that?" The quarter steps back as if to whisper the signal, and with opposi-

tion's attention distracted, the ball suddenly is snapped to a back, who is off with it. My 1913 team made up such a play on the field once against Iowa when Jess Hawley was coaching there. Snitz Pierce, our fullback, rose suddenly, pointed over the Iowa line and yelled "What's that?" The Iowans turned around to look and Captain Norgren made twenty yards. Hawley evidently was impressed, for he uncorked a variation on Northwestern later. The play so confused the reporters that the true inwardness of it was not printed until a week after the game. Hawley had taken the precaution of consulting the referee beforehand, a referee in an earlier game with Nebraska having stopped the play, which he had no more right to do under the rules at that time than he had to tackle a player.

In the midst of the Iowa-Northwestern game, Gross, the Iowa quarter, was seen to be walking forward with the ball as if pacing fifteen yards. When he had stepped this distance he abruptly broke into a run and was not downed for seventy yards. The play had been called for by signal. The Iowa line had straightened up suddenly. One man lifted his voice in the cry, "They ought to be penalized! We ought to get fifteen yards!" The others glared at the referee. Gross picked up the ball. "I'll mark off fifteen yards myself," he announced heatedly, and solemnly paced off the distance, holding the ball in front of him, while Northwestern

stared; then, having passed all but the Northwestern safety man, he took to his heels.

Only the spectacular catches the eye of the average football reporter. A good back to him is one who can carry the ball; a good end, a man who can catch a forward pass. Hundreds of false reputations have been coined in the sporting pages and still pass current. With one exception, the linemen have not played directly opposite one another since 1890. The exception is the center, who does play opposite the opposing center unless there is a strong and a weak side to the line, when he shifts a little off center.

Our low-water mark of 1901 coincided with the arrival at Michigan of Hurry-Up Yost, one of the great characters of the game. He was a highly inspirational coach and a football zealot. He has mellowed considerably, but in those days, if you permitted him to back you into a corner and start talking football you either fought your way out or perished miserably of starvation. After graduation he coached successively and successfully at Ohio Wesleyan, Nebraska, Kansas and Leland Stanford, and now he had come to Ann Arbor from the coast, bringing with him that distinguished native son, Willie Heston.

I have heard him tell the story of how a highly touted eleven from Buffalo University had come

to Ann Arbor to play an early game on the Wolverine schedule. When the first half ended, Michigan was leading 65 to 0, and Buffalo had exhausted its subs. The visiting coach proposed to Yost that the second half be cut to twenty minutes. Yost countered with a proposal that Buffalo be allowed a twenty-minute intermission in which to recuperate, with permission to use their substitutes as often as they liked. Fifteen minutes before the second half was over, the Buffaloes took themselves off the field with the score 120 to 0. Before they called it a day a stranger, closely shrouded in a blanket, had been discovered on the Michigan sideline. Yost investigated and found the stranger to be one of the visiting team. Supposing him to be dazed and to have strayed away from his own cote, Yost said, "Here, you're on the wrong side."

"Oh, no, I'm not," the stranger assured him. "I'm on the right side. They've had me in the game three times already, and there ain't going to be any fourth time."

Michigan Agricultural College, later an annual hornets' nest for the state university, but inconsiderable then, provided another preliminary game. Because of the disparity between the two elevens, it was agreed beforehand that the game should be limited to two twenty-minute halves. Michigan's margin was 119 to 0 after fifteen minutes of the

second half, when an Aggie tackle rose, flung his headgear as far as he could propel it and started off the field.

"Get back there! The game isn't over!" someone yelled.

"It's over for me," the tackle announced. "We came up here to get some experience, and I've got it."

Yost had trampled on Iowa 107 to 0 and rolled up 528 points to a goose egg for his opponents when we met his team at Ann Arbor. We had lost eight out of sixteen games, including every major contest that season, and Michigan added a 0 to 22 defeat. The season over, Yost set sail for California with Heston, Boss Weeks, Neil Snow and the rest of his bucko crew to meet his last previous love, Stanford. It was twelve below in Ann Arbor the morning they left, eighty above in Pasadena on New Year's Day. The team, it is said, had not been in a scrimmage since Thanksgiving Day, and Yost did not call on one sub, but these are not alibis this time. Michigan won, 49 to 0.

Two boys who later were to distinguish themselves, both named Maxwell, but unrelated, were on the Chicago squad in 1901. The first was Lee Maxwell, now president of the Crowell Publishing Company. He played at end and half in 1901, quarter in 1902; but when the great Eckersall appeared on the scene in 1903, Maxwell was crowded

off the team. It was a case of a first-rate player being displaced by an extraordinary player; but instead of sulking in his tent, as the average man would have done in the circumstances, Maxwell continued to turn out in 1903 and 1904 with superb spirit and fight for a position with all that was in him. I never have known a finer exhibition of loyalty and character, and I took pains to say so at the mass meeting held before the Wisconsin 1904 game.

It was no surprise to me when I heard that he had become head of one of the country's great publishing houses, and I wrote to tell him so. I could not believe that the character he had shown me in 1903 and 1904 would fail to count heavily in after life. I make the claim for football that it builds such character.

The other Maxwell was Robert W., known to us as Fat, but Tiny to the East when he left us to play at Swarthmore after 1903. He became sporting editor of the Philadelphia Evening Ledger and a widely known football official. He was killed about four years ago in a motor-car accident. I never saw a finer piece of football timber physically. He weighed 240 pounds and was lightning fast in his Chicago days. For forty yards he could travel with anyone, and he was all-American material to any eye. A born clown, he added to a ready wit a stuttering tongue, and the stories he

has left behind him are legion. Tom Thorpe told two of them at the football coaches' annual meeting last December.

He and Maxwell officiated at the Georgetown-Fordham game several seasons in succession. When these two Catholic colleges meet, the fur flies and the seismograph in the Georgetown astronomical observatory registers a violent earthquake. Tom was disturbed at the prospect of refereeing.

"Leave it to me," Maxwell reassured him. "All you have to do to gentle those broncs is to penalize 'em frequent and plenty right at the start. I'll give 'em fifteen yards on the first three plays."

The first scrimmage was entirely unobjectionable, but Tiny blew his whistle and decreed fifteen yards for holding. He waved aside the Georgetown protests. On the second play another blast from Maxwell's whistle. "Fifteen yards for unnecessary roughness," Tiny stuttered.

The Georgetown team descended upon him in a body. He chased them back, but as they went, one turned to say, "I suppose you'll penalize us five or ten yards on the next play for something or other."

"You're just a bit premature, young fellow," Tiny stuttered. "You're going to get fifteen yards on the next play too."

Another year Thorpe and Maxwell again were

acting as referee and umpire, and the battle was warmer than ever. Both sides kept protesting that the other was fouling, one boy insisting that he had been bitten. He returned later with a bloody ear, and like Charlie Gill many years before him, demanded, "Now will you believe it? Why, those cannibals aren't biting me; they're eating me alive."

Tiny blew his whistle and called both teams around him. He surveyed them severely for a moment, then offered a stuttered suggestion.

"M-m-m-en of Fordham and men of George-t-t-t-own," he said, "W-w-why in hell, d-d-don't you b-b-birds arrange to play your geh-games on Friday?"

In 1901 I installed electric lights on our field to permit night practice, and we have used them ever since. The arc lamps have been replaced by flood lights now. In the latitude of Chicago, in the autumn months, practice by artificial light is imperative if the class work of the players is not to be interfered with.

Hugo Bezdek, now coach at Penn State, put on a football uniform in 1902 and made the team at once, playing at half, then fullback his last two years. Bezdek was a Chicago boy of Bohemian parentage. He won the newspaper title of the Thirteen-Inch Shell his third season, but I never

was satisfied entirely with his playing until his senior year. His tackling was not consistently good. He suggested the remedy himself finally.

"If you will speak to me about my tackling just before every game, I think it will work," he said, and it did. I placed him as coach at Oregon after his graduation. He went from there to Arkansas. Oregon wanted him back after two years, but Penn State outbid them. Meanwhile he had become manager of the Pittsburgh National League Baseball Club.

A new championship team was building up in 1902 and we won every game but the one with Michigan. In the previous season Illinois had smeared us 24 to 0. Jake Stahl, afterwards a big-league baseball player of note, was the keystone of the Illinois eleven and he had ripped through us like a buzz saw. He still was at Illinois in 1902 and I feared his slashing attack just as much as ever. I told the new men on the squad what havoc Stahl had wrought and they were keyed up to stop him, where the older men had failed in 1901. One of these new men was Dad Farr, now a Cleveland brick manufacturer, a short 202-pounder at right tackle and as hard as one of his bricks.

We kicked off at the opening of the 1902 game. Stahl took the kick on his twenty-yard line and was off in his old form. He was a big man, but fast, with a high knee action, his legs working like pis-

ton rods. Dad Farr came at him just as fast from the opposite direction. The two just came together like wild locomotives and both bounced back for a yard. Stahl did not get up for some time and he was dazed the balance of the game. Farr was innocent of any intent to rough his man; he merely was a dead-in-earnest, fear-no-man type; he went at Stahl as fast and hard as Stahl came at him, and both were bound to feel it. We won 6 to 0, after a stirring battle, but Illinois always blamed the defeat to Stahl's daze.

The playing field, which had become a gridiron in 1882, turned into a checker-board between the twenty-five yard lines in 1903, and from 1904 to 1909 the entire field was checkered. Longitudinal markings were made necessary by the new rule permitting the first man to receive the ball from the center to run with it. This seemed such a radical step to the rules body that they added the condition that the ball carrier, in such case, must not cross the scrimmage line fewer than five yards to the right or left of his starting point. In simpler language, he could not charge directly forward. At the 1904 meeting the field goal finally bowed its head in submission to the touchdown and was reduced from 5 to 4 points. In 1903 a kicker was made ineligible to receive his own kick or to run forward and put his team mates onside, the old trick Herschberger had worked twice in one game

on Northwestern. The blocking and jostling of the kicker as he came forward under a high punt, crying "Onside! Onside!" when he overtook it had looked rough. It was innocuous enough, but the rules body threw it to the lions as a sop to the critics of the sport, and went on ignoring more fundamental evils.

Walter Eckersall walked on our stage in 1903, already a wise young football head. Like so many of our players, he was a local boy. He had played three or four years on the Hyde Park High School eleven, one of the greatest high-school teams in the records, and had been captain and quarter when they annihilated the New York high-school champs, Brooklyn Polytechnic, 105 to 0 and 59 to 0 in successive years. Eight of the eleven men that brought us our second undisputed championship were Chicago boys; the three others all chanced to be from Iowa.

We played the Army for the first time that season, losing 6 to 10 at West Point on a bad break at the end of the game. Eckersall had kicked and Chicago was going down under the ball. Hackett, the Army quarter, now Col. H. H. Hackett and a football official of note, was coming for it from the opposite direction, when the ball, by accident, struck Mark Catlin of Chicago on the shoulder. The referee construed the play as interference and gave the cadets a free catch from a point fifteen

yards nearer our goal. They employed it to boot a field goal for the winning five points.

Northwestern had tied us 0 to 0, but the Army and Michigan games were our only losses in '03. My health in 1904 was poor and became sharply worse as a result of leaping a flooded gutter with Alonzo, Jr., in my arms. I was running off three track meets in one day. A heavy fall of snow in the morning had melted rapidly when the sun burst through, and the streets were so sloppy that I had to carry the five-year-old boy en route from my home to the gym. Near the gym I took a run to clear a broad pool, landed on ice on the far side, and in a desperate effort to recover my balance I threw certain bones in my lower back out of place, discovered over fifteen years later.

Arrogant in my strength, I took the baseball squad out the first good day and knocked up flies to them. I kept this up all spring in baseball and track work, until I had irritated the sciatic nerve fearfully. Sciatica drove me to Colorado that summer, without relief, and I continued to suffer through 1904, 1905 and 1906. In 1904 I hardly lasted out the season, stopping off at Battle Creek on my way back from the game with Michigan. I went from Battle Creek to Mt. Clemens. Swedish massage straightened me out until I could sleep again, at least, and walk an eighth of a mile at a time. I tried Hot Springs in the winter of 1905

and improved a bit more, but the sciatica was being driven from the left leg into the right and back into the left again. The doctors then thought it due to super-acidity and I ate no red meats for two years but without relief.

In 1906 I went to Miami, Florida, and had a whirl at Mudlavia, Indiana, in 1907. Miami was a village and the best lot on Flagler Street could have been had for seventy-five dollars a front foot. I was there again in 1908, but I had neither the vision to see the town's future nor the money to act on it. All we had was going for medical treatment.

After a long lull, the sciatic attack returned in 1914, forcing me to coach the football team from a motorcycle side car, in which I pop-popped about the field. Another recurrence in 1919 led the alumni to present me with an electric automobile, from which I coached that year's eleven. Except for that time I went to Milwaukee long ago to get a line on Wisconsin, I never have missed a Chicago football game. I wore a cap always in my earlier years, but I had a derby on my head at Milwaukee and the newspapers reported that I had attended disguised in a derby hat. The team had a close call that day in my absence, and I never have ventured away since.

Texas appeared on our schedule in 1904. Football was young in the Southwest and no one in Chicago had any line on it, but if we could believe

the trumpeting that sounded from Austin, things were about to happen. We were told that the Longhorns averaged 197 pounds and that every man could do 100 yards in ten flat. Hutchinson of Princeton was coaching them. Between St. Louis and Chicago they dropped from sight, to be found, after two days of newspaper speculation, hiding out at Dwight, Illinois, some 100 miles from Chicago.

All this worked up interest nicely, and Ralph Wilder drew a cartoon in the Record-Herald of a fearsome herd of longhorns stampeding down upon a frightened stag. I began to be frightened myself, and that alarm did not diminish when Texas was off at the kick-off in just such a stampede as Wilder had pictured. They trampled us back to our five-yard line in no time, and the handful of rooters they had brought along were whooping the Rebel yell. At this moment Texas fumbled, the ball flying out of a tackled Texan's arms plump into the arms of Eckersall, at safety, and he ran 107 yards for a touchdown. Texas collapsed like a toy balloon and we beat them 68 to 0. I never have known another such deflation.

Yost and Willie Heston were present at the Texas game to have a look at us, and the following week at Ann Arbor they beat us 22 to 12 for the fourth successive season. It was a battle. In the first five minutes Ed Parry, our fullback, went out

with a broken leg. After twenty minutes we had lost three backs. The way Eckersall and his substitute back field fought that Michigan team on defence was something to wipe out the memory of past defeats. Fred Speik, left end, now a distinguished Los Angeles physician, was captain of that Chicago eleven, and a fighter himself.

Charlie Kennedy, next to Eckersall the lightest man, did the fiercest tackling I had ever seen outside Hinkey of Yale. Playing at left smashing half, he and Speik were deadly and forced Heston to confine his running largely to his own left, rather than to his favorite right.

We gave Yost the worst scare he had had in four years at Ann Arbor, Bezdek going over for a touchdown early in the game. Later Eckersall got loose and was touchdown-bound, but Heston managed to trip him up with a one-hand tackle.

We wound up the season Thanksgiving Day in a burst of glory against Wisconsin. Eckersall had an instinctive preference for running to the right, which our opponents had not failed to notice. I warned him several times, and before the Wisconsin game I suggested that the first time he got the ball from a kick he start to the right as usual, then shift to the left.

"Some day it will give you a touchdown," I prophesied. "In any event you'll gain more ground."

The game was played on our grounds. In the middle of the second half Melzner kicked off for Wisconsin, Eckie took the ball on our five-yard line and started to the right, as usual, pulling the on-coming Badgers with him. Suddenly he veered to the left, circling Captain Bush, their right end, eluded Melzner at safety and ran 105 yards for a touchdown, to be carried off the field at the end of the game on the shoulders of a crazy mob. Wisconsin had reason to respect Eckie. The previous year he had booted three field goals to Wisconsin's one touchdown and the posters at Madison had read, "Eckersall 15, Wisconsin 6."

The old five-yard football as we played it in the Conference from 1900 to 1906 was a great game to watch. Speed was its first name. In the Chicago-Wisconsin 1902 game there were 112 plays in the first half. In our game with Michigan that year there were 100 plays in each of the forty-five minute halves. This speed was intended to wear down the other fellow, and the team in the best physical shape cleaned up in the second half. Series plays hitched together in sequence with only one signal, and played off as fast as the team could line up, contributed to this breathless pace. And Eckersall and Walter Steffen, his successor, were great drivers.

The tempo of the game today is much slower. Unlimited substitutions now balk any possibility

of winding the opposition. The prevalent huddle as first used further slowed up things. The huddle goes back a long way for occasional use, but Coach Zuppke in 1922 was the first to employ it constantly. The drowning out of signals by the hullabaloo from the stands led to its general adoption. In 1914 we failed to win our game with Wisconsin because Vruwink, left end, missed a signal in the racket coming from a tallyho load of Wisconsin rooters, all with megaphones, near the corner of the field. We were down on Wisconsin's two-yard-line, with the score 0 to 0. The signal called for the fullback to take the ball through Vruwink's position. He thought the play was going the other way, dashed back and collided head-on with his fullback, and the game ended 0 to 0.

Our number of games a season was falling steadily. From twenty-two in 1894, including postseason contests, we were down to sixteen in 1901, fifteen in 1902 and fourteen in 1903, the last season we played in midweek. This reduced our schedule to ten in 1904. In the great upheaval following ing the season of 1905 the Conference by fiat cut the season to five games, later restoring it to seven and now eight; but there is no more midweek playing.

There is a strong movement now in the Big Ten Conference toward giving more students the benefit of competing in intercollegiate games, espe-

cially football and basketball, by having second teams play.

The uniform was developing gradually. In the 90's, Smock's laced canvas jacket came to be joined to the trousers with a wide web of elastic. A mouse-colored fabric with a nap replaced canvas in the trousers, the nap and color suggesting the name "moleskins," once a popular idiom for the whole uniform.

We next discarded Smock's jacket altogether and reverted to jerseys. The jersey would work out of the trousers and games were being lost by seized shirt tails. I finally asked Johnny Johnson, our trainer, to work out a jersey that would stay in place, suggesting that it might be fastened under the crotch. Johnson took the idea to a knitting mill and put it into production. It is used universally now, is patented and brings in a respectable royalty, but not to me. My attitude was that of a football scientist. From time to time I made definite contributions to the development of uniforms.

In 1903 I was advising my men to use as little armor and protective gear as possible. The shin guard had passed from the scene. When I played at Yale these were big and cumbersome and we wore them inside our stockings. Finding that they hampered my running, I went to a shoemaker, got two thin pieces of calfskin and bound them around my

ankles. They gave me all the protection I needed. By 1903 we were using little headgear, some nose guards in practice, but rarely in games. The heavily padded jersey of the 90's was passing out, but I insisted on shoulder protection, collar-bone injuries being frequent.

The greatest team that ever wore the C in the time of five-yard football brought us the championship in 1905. To Bezdek, Catlin and others who made their bow in 1902 were added such 1903 recruits as Detray, Eckersall, Parry, Bert Gale, Dan Boone and Bubbles Hill, seasoned now by two and three years of teamwork. Add Art Badenoch, Babe Meigs, Fred Walker and Clarence Russell to this, shake well, and you had a football team.

W. S. Kennedy, Captain in 1898 and in 1899, and Mark Catlin, Captain in 1905, were Chicago's two greatest defensive men at backing up the line under the old rules. Both had the art and strength for turning the runner and mass backward on line attacks, with the requisite speed, and deadly tackling for picking the runner off on off tackle and round the end plays.

Indiana alone scored on us, but we did not have to travel far to find playmates worthy of our mettle. Phil King of Princeton had turned out one of Wisconsin's greatest teams and we spent a lively afternoon beating them 4 to 0. We played on a

new athletic field at Madison, sodless and gooey from much dampening. Three times Eckie got away to the safety man on a new trick play in which he pretended to give the ball to one half, then to the full, but kept it and circled the end on the side he first faked, only to founder in the mud. Meanwhile Roseth, the Cardinal fullback, was hurdling our line, propelled by Vanderboom and Findlay, a great back field, and giving our sterling right tackle, Badenoch, a terrific pounding.

At one time he almost took the count but gamely rallied and with the splendid close up support of "Dan" Boone, right half, stopped their concentrated attack.

All three Wisconsin backs were giants and their attack an example of the mass formations outlawed in the revolution that followed that season. Working the ball down on Wisconsin's four-yard line late in the second half, Eckie took no chances on a touchdown, but booted it over for goal and victory.

And now for Michigan! Yost still was the prairie fire of Western football. In five years his Michigan teams had rolled up 2746 points to 40 for the combined foe. In eleven games that season they had not been scored on while making 495 points. It was the heaviest team I ever saw. Schultz, the All-American center, weighed 220 tounds; Octopus

Graham, at one guard, weighed 245; Schulte, the other guard, 195; and Captain Curtis, a giant from Pueblo, Colorado, was at left tackle.

Ours was no featherweight eleven, nor leaden-footed either, and one of the classics of American football ensued. I do not hesitate to name it the greatest game I ever saw played under the five-yard rule, then in its last season. The day was Thanksgiving, the weather clear, brisk and fine for once, and 25,791 spectators paid $35,000 at the gate. The Atlantic Coast had discovered us. Among the Eastern delegation were Walter Camp and Caspar Whitney.

The first half was played almost entirely in the center of the field. The nearest we got to the Michigan goal was their thirty-five-yard line, their nearest to ours, our fifty-yard line. It was punt, punt, punt, with Garrells, later an Olympic hurdler, holding his own against Eckersall.

Until well into the second half we had not advanced beyond their forty-three-yard line, except to recover a fumble on their thirty-seven-yard line; and they had not penetrated our territory at all. When we did seem to be on our way, Michigan stiffened; we kicked from punt formation and Garrells carried the ball around Chicago's left, back to center field. Later a fine punt by Garrells, followed by a penalty, put the ball on Chicago's eight-yard line. Followed the most daring play I ever

saw in a championship game. Eckersall fell back behind our goal line as if to punt out, the orthodox strategy, then ran the ball brilliantly back between the goal posts to the twenty-yard line, while 25,000 hearts palpitated.

Captain Curtis of Michigan was put out of the game early for bumping into Eckersall after he had kicked, despite Curtis' protest that he had intended only to block it. We had lost Leo Detray, a great half, in the Northwestern game, Johnson, the Indian quarterback, formerly of Carlisle, having jabbed a finger into Detray's eye accidentally. An oculist ordered him not to play again that season, and he was put in a dark room. On his promise not to leave the stands, the specialist permitted him to attend the Michigan game. Stirred to a frenzy during the first half, he came to me during the intermission and begged to be sent in. Badly as we needed him, I couldn't accept the responsibility, but without my knowledge he put on a suit. In the second half Fred Walker's bad knee gave away and Detray came tearing from the sidelines to take his place.

With the game still knotted 0 to 0, Eckersall punted over the Michigan goal line to Clark, who, instead of touching it down and bringing it out unmolested to the twenty-five-yard line, tried to run it out in the hope of getting free. Just as he crossed into the field of play Badenoch tackled him

low and Captain Catlin, our right end, hit him high. Together they slammed him back over his own goal for a safety that won for us, 2 to 0. Yost's long string was broken. We had won on an error of judgment, and we had been lucky to do it.

A hero is a man who takes a long chance and gets away with it; a goat is a man who risks all and loses all. Had Clark broken through us for a touchdown, his name would be a shibboleth for Michigan freshmen today. He had gambled as Eckersall did, although Eckersall's was much the smarter play of course—and had failed.

President Harper was bedridden by cancer that day, dying the following January. He had insisted on all members of his family attending, while Prof. Elizabeth Wallace remained as nurse. A special telephone wire had been run from the field to his bedside at his instruction. I never knew the full story of that afternoon until Professor Wallace told it at a banquet given by the board of trustees in Ida Noyes Gymnasium in December 1925.

Doctor Harper's excitement grew until he could no longer hear clearly, she said, and he asked her to take the receiver and repeat the running report to him. When the first half ended he said to her, "You just run as hard as you can all the way and tell Mr. Stagg and the team for me that they must win this game." She ran as directed and delivered her Garcian message. I knew that word had come

to me during the intermission, while I was talking to the team in Bartlett Gym, that the president asked us to win, and I had given the message to the men, pleading with them to win for the dying president's sake; but I did not know who had been his messenger and how she had carried it.

Detray played that afternoon at a heavy sacrifice, I fear. He never has recovered the sight of his injured eye except casually. This was the most serious hurt that ever has befallen a Chicago player, and the only lasting injury I can recall. In forty-three years I never have seen a critical injury in the sport. In 1903 Prof. Edwin G. Dexter, of Illinois, who had been keeping a careful account of all injuries in all sports over a period of years, confounded critics of the game with a set of statistics that left football looking relatively innocuous. Yet the evil was there. The Chicago Tribune's compilation for the 1905 season showed 18 dead—eleven high-school players and 3 collegiate—and 159 more or less serious injuries—88 collegiate and 47 high school. The fact that most of the deaths had occurred among immature and untrained high-school boys did not lessen a grievous state of affairs.

After 1905, the deluge. In midseason President Roosevelt had called representatives of Yale, Harvard and Princeton to the White House and told them it was up to them to save the sport by removing every objectionable feature. "Brutality and

foul play should receive the same summary punishment given to a man who cheats at cards," he had said. At Columbia, the faculty peremptorily abolished the game and Columbia did not play again until 1915. Northwestern and Union suspended the sport for one year, and California and Stanford abandoned it in favor of Rugby, from which it had sprung, only to begin at once to change the rules, just as had happened on Rugby's first introduction into American colleges.

Chancellor Henry M. McCracken, of New York University, invited President Eliot, of Harvard, to step into the breach. Doctor Eliot declined for lack of jurisdiction. The closing sentence of his letter read: "Deaths and injuries are not the strongest argument against football; that cheating and brutality are profitable is the main evil."

We had seen very little of either in the Conference, thanks to our much closer supervision of the game, but we were swept along in the current. For all the splendid work the Conference had accomplished, more remained to be done. The usual faculty conference followed the season and I was present. A special meeting was called, by which time my sciatica had driven me to Florida. They adopted drastic reforms, requiring the approval of the individual faculties. One year's residence and a full year's work were required of all candidates for teams, with playing limited to three years.

Thanksgiving Day games were abolished, and practice prohibited before the regular opening of school work. The training table was scrapped and schedules limited to five games, with all contests where the rivalry was especially warm suspended for two years. This took away our Wisconsin and Michigan games and left us only Purdue, Indiana, Illinois, Nebraska and Minnesota.

Unfortunately the committee made the three-year rule retroactive. Retroactive legislation always is unsound, and I like to believe that had I been able to be present I could have prevented this step, which, more than anything else, drove Michigan out of the Conference. They alone repudiated the agreement, the board of regents taking the action out of the faculty's hands under pressure from the alumni and the athletic powers. Professor Pattengill, their representative, and a splendid man, had had a leading part in framing the reform program, and I have heard it said, whether true or not, that his death was hastened by his university's repudiation. Michigan did not return to the Conference until 1917.

Meanwhile in the East a joint committee had gone to work on the rules on January 12, 1906, and completely rewritten the code after many sessions. To bring about a more open style of play, the momentous forward pass was introduced, everyone on the offensive side was made eligible to recover

a kicked ball from scrimmage as soon as it touched the ground, and the distance to be gained became ten instead of five yards, with three downs. The playing time was reduced ten minutes in each half, hurdling was forbidden, drawing back tackles and guards to use as interferers was stopped, and linemen forbidden to interchange with backs unless permanently. The Big Three conferred tardily, barred freshmen from their teams and imposed a year's moratorium on players coming from another college.

The good old days were gone, and none mourned them long. Football's greatest growth dates from that housecleaning.

CHAPTER XII

I'D DIE FOR DEAR OLD RUTGERS

WHILE the pretty fancy that calls a spade a Little Giant steam shovel continues to play over American business, the football coaches may yet get together and emerge as emotional engineers. Emotion is the unknown and highly explosive quantity in football, and each coach is his own powder monkey.

A Conference coach grew cocky several years back about his Illinois game. His team had been rubbing the Illinois nose in the dirt regularly, and on form, it would do it again. At a pre-game student mass meeting he was so ill advised, as the story comes to me, as to boast that good old Siwash did not need eleven men to lick the Illini; give him eight men and three women and he'd do it any day.

Swift couriers galloped to Urbana-Champaign with this bit of gasconade and reported to General Zuppke at great headquarters. Nothing Coach Zuppke possibly could have said to his squad could have produced the maddening effect of this sneer. They went berserk, leaped upon Siwash in a crying rage and ripped them from stem to gudgeon. There

is not the least doubt that the Siwash coach talked himself out of that game.

It isn't often that such manna falls from the skies upon a grateful coach, but a contemporary once did as much for me. Once upon a time there was a boy of Irish-American extraction on the squad who had come to us from four years of high-school football triumphs. He was good—and did he know it? In my time I have had a few such prima donnas. They were more frequent in the earlier days, when the squads were smaller and a good man knew he had a cinch on his position. Rather, he thought he knew it, for there never has been a player on a Chicago team so valuable that I would permit him to run it. I have known of such elevens, but in justice to the sport let me add that it develops few soloists. It needs an unusually bumptious ego to survive the emphasis in football upon teamwork and subservience of self—another reason why the sport builds character.

This lad was capable of anything on the field, but he was an in-and-outer, playing when he felt like it, idling when he didn't. In his first year on the varsity I had to order him to turn in his suit. He snapped out of it and came back on his knees. His head was less outsize the second season. His third and final year the improvement continued, but he was not yet 100 per cent.

My rival coach had been the mentor of a high-

school eleven that had played against the high school from which the boy came to us, and he knew the lad's temperament both by experience and hearsay. Some two or three weeks before our game with the university team he now coached, I sent a scout to look them over.

The scout met the coach, who, in talking with him, said, in passing: "Is that Irishman still playing for you? There's a lemon if there ever was one." The scout brought the comment back to me and I tucked it away for possible future use. On the Wednesday before the game in question, I noted that my man was not showing much interest in practice against the scrubs. I called him over.

"I give you up," I said. "You're no good; you're just what Coach Blank says you are—a lemon."

The boy winced as if cut with a whip, but said nothing. I met him on the street the next day. He stopped me and said, in a voice that choked: "Mr. Stagg, I've been thinking about what Coach Blank said about me. If you'll let me play Saturday I'll show him whether I'm a lemon or not." Which he did!

A coach cannot hope for such aid and comfort from the enemy more than two or three times in a life, but a purely fictitious slur often will serve the same purpose, and there are coaches who manufacture them. A Northwestern squad once was told that my stock comment, when a Chicago

player did not perform to my taste, was a sneering "You play like Northwestern." That story was utterly false. I said nothing resembling it, and would not, both for honesty's and for policy's sake, but presumably it had its effect.

There is a well-known coach who could qualify for the All-American anonymous-letter-writing team. Getting the other fellow's goat is half the battle, he argues, and annually he is accustomed to writing a letter to his more formidable opponents, signed, perhaps, Truth and Honor. The content varies. Sometimes the rival coach is warned that there is a traitor on his team, that his signals and trick plays are all in the hands of the enemy. Anything calculated to break down the morale of the other coach and team serves his purpose, and he does not lack ingenuity. Annually he writes a scurrilous anonymous letter to himself and posts it to an agent in the college town from which he wishes it to seem to come. When it returns to him he opens it before the team. "Listen!" he thunders. "Here's what Punxsutawney thinks of you!" And he reads the letter aloud. Just before the game or during the intermission, he reads them the letter again.

That is one form of goat-hunting strategy. Percy Haughton once used another and a smarter brand on Yale. As the crowd was gathering for the 1913 game at Cambridge, as I have heard the possibly exaggerated story, Haughton had something

like three dozen footballs distributed widely over the stadium field. This done, Charley Brickley of the miraculous leg and the patent-toe right shoe, trotted out and is said to have booted them one by one over the crossbar, without a failure, leaving two on the center-field line until the last.

Now he lifted one over the north goal post, turned around and kicked the other over the south goal—and trotted off. That was showmanship. Harvard won the game 15 to 5, Brickley kicking five field goals for the Crimson's only points.

There are as many different methods of keying a team up to concert pitch for a game as there are coaches to do the tuning. Some are legitimate, others are illegitimate. As both sides in the recent war—or in all wars, for that matter—did not hesitate to lie officially to their peoples and their armies if it served a military purpose, so some coaches hold that the end justifies the means and add football to love and war. That is a matter of taste. Personally I can't say much for the coach that has to lie to his men to make them play, or the team that has to be lied to. It wins sometimes; so does an occasional race horse, made frantic by a hypodermic or an electric battery beneath its saddle blanket, win.

Going to New York in March, 1924, to attend a meeting of the rules committee and to speak at an alumni dinner of the Big Ten universities, I

met Frank Whiting on the train. Whiting was an end on the Chicago eleven of 1915, and a good one.

"Do you remember that time I caught a forward pass in the 1915 Minnesota game, ran about fourteen yards with it, then dropped the ball just as I was crossing Minnesota's goal line, and a Minnesota man fell on it for a touchback?" he asked.

"Perfectly," I assured him.

"Do you remember how you treated me the following week, before the Illinois game?" he went on.

"I'm not sure about the details, but I imagine I didn't give you much chance to play end that week," I told him.

"I'll say you didn't," Whiting mused. "You gave me no chance at all. You played me at guard and tackle and carefully ignored me all week. I was scared to death that you weren't going to let me into the Illinois game, the last of my career, and I was so worked up before Saturday that I could have chewed nails.

"Then we gathered in the tower room before the game. You talked to the squad like a Dutch uncle. When you finished, you began to call off the line-up. You started with the back field and named them. Then you moved clear over to right end. You named a right end, right tackle, right guard, center, left guard, left tackle—and then you paused. By that time my heart was pounding like a Salvation Army drum.

"You waited a minute, then said, 'I'm looking for a left end.' No one said anything, but I felt like thirty cents.

" 'Does anyone know where I can find a left end?' you asked.

"Still no answer. You sort of looked under the bench, in the corners and out of the window.

" 'Is there anyone here who knows how to play left end?' you persisted. I tried to say something, but nothing would come out of my mouth.

" 'In that case,' you said, 'I haven't any left end. I guess I'll have to pretend that this man Whiting is one, but I'll never fool Illinois.' "

This was pretty rough on a good man, but as Whiting told me, "By that time I was keyed up so that I would have broken my neck gladly." And as a matter of fact, he did smash his shoulder against an Illinois knee in the first ten minutes of play and had to be taken out.

The scene in the tower room of Bartlett gym described by Whiting occurs before every Chicago game, although not always with such concentration on an individual. But I never select my team until the day of the game. My motives are both tactical and psychological. Conditions may change at the last moment; and in any event, I purposely keep the men in suspense as long as possible in order to heighten their emotional tension.

In the midst of one Princeton game I had to der-

rick a veteran out of the game for poor work. He showed his resentment, but we were in New York the next day and I did not see him, and on Monday at workout the team was in a celebrating mood. On Tuesday I noticed that my man was sulking. As we were leaving the field he overtook me and demanded hotly, "Mr. Stagg, why did you take me out of the game on Saturday?"

"I took you out because you were not doing your best," I told him frankly.

"I was, too, doing my best," he argued.

"Do you remember when you went down the field at half speed under that punt?" No, he did not remember.

"Do you remember when Rafferty was dragging So-and-So along and you stood within two or three yards and did nothing?" He didn't recall that either.

"Do you remember the second time you loafed under a punt?" No, I was all wrong.

"Well, that's the time I took you out," I added.

He continued to argue resentfully until I turned on him. "Heaven help you in your later life if you don't take a tumble to yourself," I said. "You are a self-satisfied, opinionated young jackass who is bigger than the team, the coach and the school together. Go take a good look at yourself—and come back when you see what I do."

This was spoken to the man alone; but once I

had to lash a man before the whole squad, a task all the more distasteful in that the victim was a weak and diffident soul with no tough coating of ego to protect him. He was an only son, the darling of a foolishly fond mother. Sometimes these only sons of overfond parents are vicious; sometimes they are only soft, flabby and characterless. This boy was the latter. The team was a weak one, but he was a sensational drop kicker and punter, so extraordinary that had there been a heart behind his good right foot the team might have been formidable. In practice he could stand near midfield and drop the ball over the bar repeatedly, but in a game he lost his nerve. Nine times, against an opponent we strive particularly to beat, he had an easy shot at a field goal, and nine times he flunked it. The opposition finally booted a goal and we lost by that three-point margin.

The Young Prince was another such only son. He was as magnificent a piece of athletic timber as a coach might dream of, weighing 225 pounds of bone and sinew, stripped. He had size, speed, coordination, power. He had everything, on the field and off, for he was the handsomest man on the campus, genial and possessed of a portfolio of parlor tricks. Without ever having known a day of training, he stepped onto the field and tossed the hammer, shot and discus farther than the best we had.

This genial young giant had been brought up by a doting father and mother, who yanked him off the football squad the moment they heard he had turned out and before he had played a game.

Conscious of his gifts and resentful of the unnatural prohibition, he just dropped his oars and drifted, with such poor grades that he never again was eligible for any team, until finally he quit. For fifteen years better than a passing grade has been demanded of athletes at Chicago. We have five grades—A, B, C, D and F. C is the lowest graduation or eligibility grade.

D is a recognition of the fact that otherwise fine minds have no capacity for certain subjects.

Bulk, strength, grace and speed are so much lath and painted plaster if they are not backed up by football temperament, and imagination is the prime ingredient of that temperament—imagination to dramatize the conflict and one's own part in it, imagination to anticipate what and where the foe's next move will be, imagination to capitalize instantly on any break in the game.

Football is a game apart. Baseball, tennis, golf, lacrosse or soccer, are all fine sports, but they lack the direct impact, the hand-to-hand struggle, not of individuals but of massed groups in which virtually every man is engaged up to the hilt in every moment of play. To vary the figure, football is the infantry of competitive sport. Baseball, tennis

and the rest are the artillery, the engineers, the signal corps, and the like. Each is essential, each has its own attractions; but it is the foot-slogging infantry that goes over the top with fixed bayonets to meet the shock troops of the enemy.

Within its limitations football is an art, and players are born, not made. It is easier to manufacture a halfback than to fabricate a poet, a painter or a concert violinist, but only relatively. Certain physical attributes enter into being a football player, but a manufactured tackle or fullback always will remain an automaton, a mechanical piano. On the other hand, a boy weighing only 110 pounds automatically is debarred from college football. No amount of football sense can overcome such physical slightness, and this has grown more true as the tackling defense has improved.

Yet for the most part relatively small men, weighing 160 pounds or less, have been the most spectacular players Conference football has produced. Eckersall weighed only 132 when he reported on the squad, and never more than 145. His successor, Wallie Steffen, Rollie Williams of Wisconsin, Oliphant of Purdue and the Army, Pete Russell, Paddy Driscoll of Northwestern, Chick Harley of Ohio State, John McGovern of Minnesota, Harold Pogue and his Illinois co-star, Potsy Clark, Kipke of Michigan—all were in this class. Aubrey Devine of Iowa and Grange weighed

170 and 175, respectively and the great Willie Heston ten pounds more.

The small man carries his weight in better balance, is more agile, more graceful. Running in a shorter stride, as a rule, he can check, pivot, swerve, stop and get under way again without loss of equilibrium. Superficially, long-legged men would seem to have an advantage in sprint races; but Abrahams, the English winner of the last Olympic 100-meter final, is one of the few tall and rangy sprinters to set a record. Their stride is longer, but they don't get as many revolutions a minute, as an engineer would say.

Although they reach college earlier, boys are larger than they were in my youth. They are taller and heavier on an average and in particular I have noted the steadily increasing size of their feet. Our statistics show a similar increase in height and weight among women students since 1892. They should be larger; children are better nourished, better cared for, surrounded by sanitation and preventive medicine. It may be that a difference in the New England and Middle Western physiques has something to do with it.

The enrollment at Yale in 1888 was 1026. All were men and all eligible for athletics. This approximates the male undergraduate enrollment at Chicago from which we have to draw for our teams, but our men come in much larger sizes.

When I was in England first in 1900 nothing struck me more forcibly than the physical disparity between the upper and the lower classes. The English aristocrat usually is a fine physical specimen, the English clerk and factory hand usually the reverse. Generations of good housing, good nourishment and open-air sport have produced the one; generations of poor food, poor housing and cramping work have produced the other, until the line of caste demarcation is physical as well as cultural and financial.

No one blanket will cover all the unimaginative football candidates. Some are merely clods, with no emotional nature and no capacity for losing themselves. Once we had a big boob—no other description fits him—on a Chicago eleven. He was a splendid physical specimen, weighing 220 and fast for his size. We had fought a great battle with Cornell on our own field, coming from behind to tie the score 6 to 6 in the last minute or two of play on a touchdown from a double pass followed by a forward pass, which I had invented for this game.

The next year we went to Ithaca keyed up to win. The game was played on the old Cornell field in the valley, overlooked by a high cliff on which several hundred deadheads had gathered.

We were almost on Cornell's goal line, with the team on fighting edge and the tension breathless,

when this man looked up interestedly at the crowd on the bluff and speculated to the man alongside him: "Say, what do you suppose would happen if that bluff should cave in with all those people?"

There was imagination, but sadly out of place. There are many men of superb imaginations in other respects whom football leaves cold. "After all," they tell themselves, "this is only a game; let's not get too excited about it." Meanwhile a true player will have become so engrossed that the game is as real as life and death, with honor and all at stake.

Other men are superb for five minutes, ten minutes, fifteen minutes. Their capacity for imagination, for forgetting themselves, is limited to these periods. For that long they play magnificently, but on a false emotion—the stimulus provided by the crowd, or an exhibitionist complex. But when the doggedness of the fight sinks in and they become conscious of some physical discomfort, they suddenly turn realists. "What am I getting so steamed up about?" they ask themselves. "What's all the shooting for anyway? The sun will come up tomorrow morning, children will play and the furnace ashes will have to be hauled just the same whether we lick Mugglesdorfer or Mugglesdorfer licks us." From that moment they are worse than useless.

The real player, on the other hand, never feels

his bruises. He is enjoying himself hugely. The hotter the battle, the more his body glows with a physical exaltation and his nerves thrill to the impact of flesh against flesh.

Sometimes it is a man's physical endurance that is limited. Bubbles Hill, a ripsnorter tackle, one of the best on defense I ever had, was good for not more than twenty-five minutes his first season; then he collapsed. The second season he could last out a half, the third year he could finish a game. His trouble was purely physical and it was cured, but no psychologist has yet learned how to cure the mental hazards of a player.

The mechanical player we have with us always. It is a fortunate coach who is not compelled to use one or more every season. They master the technic and perform perfectly in practice, but they cannot transfer the technic to a game. Such a man lost us a touchdown in a Michigan game once. To take a forward pass, the Michigan receiver had run beyond this Chicago half. The pass was short and fell right into our man's hands. Most backs would have been off like a shot with it; but though he had played five years and though he intercepted the ball prettily, he now had to stop and ask himself what to do next. In that moment his opportunity passed.

We had another man once whose technic in line play was nothing less than perfect in practice. He

performed to specifications in a game, too, just as long as his opponent played as expected. At any variation in tactics he was lost. He knew only how to play by the book. A pianist goes through certain exercises, so does a football player; but when the notes change, both are expected to follow the music.

Eleven men 100 per cent in ability are too much to hope for; but given a sizable squad, any coach can see to it that he gets 100 per cent in spirit. All I ask is to have enough men fighting for places on the varsity to insure none of them being certain of his job. Every now and then we get a man who is indispensable, but who will not give his all in every game, nor all the time in any game. When I possibly can do without such a man, even if he is a football genius, I won't have him around. The conscientious player never is a substitute for the genius, but give me plenty of them is my prayer. You will probably win more games with the genius but he brings more problems and less real satisfaction. The boy who is worth his weight in gold is he who is always in every play and every game up to his neck, and I will forgive him if he falls short of All-American brilliancy.

There are two divisions to football psychology—the pre-game preparation of the team for battle and the maintaining of this high tension throughout the game. There was little pre-game psychology when

I played except the hate propaganda of the old grads who came back before the big game to pump poison into us. They recited all the dastardly deeds of the enemy in years past, predicted more to come, and assured us that none but a scoundrel could survive in the fetid air of Princeton and Harvard. Meanwhile the Harvard and Princeton elevens were being informed of what a crew of blackguards, barn burners and strike breakers they might expect from Yale.

Often the old grads were pathetically sincere. They had come to believe that Yale, Princeton or Harvard, as the case might be, was populated half by contemptible milksops and half by horse thieves and train wreckers. That was the correct way for a college man to feel, and the Big Three set the styles for all American colleges. We used to sow a fine crop of dragons' teeth ourselves in the Conference in the first fifteen years. That hatred that once glowed at white heat has been cooling steadily and surely, but it still will raise an occasional blister around big-game time. I hope it may pass altogether in my time; but every college has one, sometimes two games, that do not inspire a philosophic calm, and some of the strafing spirit will survive, I suspect.

This poison gas indubitably has accomplished miracles at times where nothing else would have availed, but it is not essential to the best results,

and it is not a credit to the coach or the school that employs it. The better plan lies in an appeal to the loyalty, sentiment, love of the university, love of one another and self-pride of the players. They are potent enough for any purpose if you know how to use them.

I stress this pre-game preparation, but I concentrate largely on the big game, experience having taught me that a team cannot be kept at concert pitch safely for a longer period. I always hope that my teams can win without evangelism, but I never neglect that mental preparation. Before a big game I use every legitimate weapon I can command to rouse the heart, mind and temper of every man on the squad to a point where he can exert his supreme effort.

Every coach is not capable of inspiring this intensity always for even his big game, and no coach can do it for every game, for there are other factors than the coach. He can count usually on united support for the crucial game, but he may have the student body, the fraternities and the newspapers to combat before the lesser contests. Occasionally he is confronted with defeatist propaganda, but much more often he has to go to the mat with overconfidence. He may foresee great danger in a specific game, but because the opposition commonly is weak or has shown little that far in the season, it is underrated by the newspapers and the

student body, and the coach's warnings may not be taken too seriously by the team. There are no more soft snaps on our schedule. The time has passed when I dare to ease up one Saturday to save something for the next.

Most rooters never concern themselves with more than the game in hand. A coach must plan a campaign. Periodically he is bombarded by demands from the student body to run up a score on a certain relatively weak team because a major opponent has walloped this eleven 30 or 40 to 0 earlier in the season.

That is a form of competition which never has interested me. I prefer to make my showing against the major opponent when the time comes.

During the intermission the coach, in a very brief period, has to point out both his own team's and the foe's weaknesses and strength, and to rewind the emotional clockworks of his men. I first get the reports of my assistants. With that addition to my own observations of the first half, I ask my linemen why certain plays have failed to work. I point out errors of judgment in the stationing of our own players on offence, but particularly on defense, and blunders of the opposition which we have failed to capitalize; analyze failures in our strategy and advise changes and additions to meet the conditions that may be expected to arise in the second half, judged by the first half's play.

Then I endeavor to key my men up again, first talking to individuals, then to the team as a whole. If any has failed to do his best I tell him so bluntly. Often I am only well into my talk when an official will pound on the door and shout his warning, "Two minutes!"

The coach is expected by the students to make his own contribution to the drama of the game. He is a bellowing bull, by popular picture, and if he does not blow fire through his nostrils and toss an occasional player on his horns, there is disappointment. It is exciting to watch and looks important, but it is not necessarily so. The coach may be more concerned with getting his moment in the spotlight than in getting results. A certain amount of this showmanship sometimes is necessary for its effect on the team, but it is no mandatory part of the equipment of a first-class coach. The team should be allowed in the picture too.

It is not uncommon for coaches to curse their teams with everything in the index of profanity, both for its supposed goading effect and because many men cannot express themselves emphatically without recourse to profanity. For several reasons I do not do it, and never have. I am not a profane man in the first place. Secondly, I have observed that, like all forms of over-statement, cursing is an opiate and progressively increasing doses are necessary for effect, soon defeating its own purpose.

Thirdly, when cursing really does get under the skins of the players, it is likely to leave a permanent wound. Many men have left college with an abiding hatred for a coach who probably bore them no malice whatever and who had cursed them quite impersonally.

At a monthly board meeting in late October or early November of 1901, one of the two or three worst football seasons in Chicago's annals, I was dumfounded when President Harper, who always presided, said to me, "Mr. Stagg, I understand that you are doing a lot of swearing on the athletic field."

"You are misinformed Doctor Harper, I never swear at any time; I don't believe in swearing at a team, and I can't understand how such a report could be circulated or credited," I replied.

Professor Thatcher, of the history department, a football fan who watched the practice daily, rose to my defense. "I am sure, Doctor Harper, that you are misinformed," he said. "I am on the field every day, and in years I never have heard Mr. Stagg utter an oath. The only thing I ever heard him say that would even approximate an oath was 'Oh, the devil!' "

Up to now the president's face had been perfectly straight. "Perhaps that is the trouble," he suggested with a grin. "Maybe the team would do better if you cussed a little."

"It is true that Stagg does not swear at his men," Coach Zuppke told his class in coaching once. "But he calls this man a jackass, then that man a jackass, then another a jackass. By the end of the workout there are no human beings left on the field."

I do use that epithet. John Schommer, who was on the '08 football team, now a widely known football and basket-ball official, advanced the claim at an alumni meeting some time back that he was the original member of the Jackass Club. "I not only have been called a jackass but also a double jackass," he boasted. He inquired if any fellow members of the club were present. There was a large showing of hands, and Schommer elected himself president of the club.

Zuppke's course in coaching includes a study of the personalities of various coaches. I was told once that he described me to his class as a gambler. This was at a period when I had a very light back field and was forced to take chances. I vary from taking a lead-off to hugging the base, depending entirely on the sort of material I have. It is true that Chicago teams have played as open a game as the Conference ever saw, but lately I have been much criticized by the newspapers and students for the closed safety-first style of our tactics.

A coach is a semipublic character and a legitimate mark for criticism and advice. After a game he is the recipient regularly of anonymous insults

and signed glorifications; but criticism, praise, abuse or advice—I go my way. A coach worth his salt knows his problem a lot more intimately than any onlooker; and knowing it, he must hew to the line, let the alumni, student, newspaper and opposition chips fall where they may.

I have the name locally of being a bear, so much so that Stagg Fears Purdue is a byword and a jest of the Conference season. Because we had beaten Purdue regularly for thirty years, until Purdue's 7 to 0 win in 1926 justified my fears, my sincerity was impeached when I declined to assume that we would do it again. Purdue grows more formidable annually and is less and less to be taken lightly; but apart from that, it never is safe to assume that you can defeat any team. You may have eleven faster, heavier, headier men, but the other fellow may land on you with intangibles that can't be shown on any form chart. He may, for instance, be taking, with the high resolve of a crusader off to the holy wars, a game which you have thought of only as an interlude between two Saturdays of importance.

I have still further reason to guard my tongue. The newspapers have a way of freely translating a coach's comment. If I am asked by a reporter what I anticipate from Purdue and I say "We ought to win," I am more likely than not to find myself quoted in the next day's headlines this-wise: Stagg Says Maroon Will Smear Purdue. "We ought to

win" is tame and tasteless, and reporters, with a professional instinct for the dramatic, rewrite it for you.

A coach does not need the gift of tongues to exhort his team to tearful tautness, for the bigger games, at least. We are, contrary to tradition, one of the most emotional of peoples, and the whole atmosphere of college life conspires toward this end. The day the impressionable freshman arrives on the campus he is caught up in a sentiment more vocal at any rate than anything he will experience in life. He may, and will, I hope, love his wife, his children, his parents, his country and even his work more than he does his alma mater, but he will not be so openly demonstrative. He is trained to curb his outward emotions toward his family; too loud insistence on his love for his country only will discredit his sincerity, but he is accustomed and expected to embrace his university in public without inhibitions or self-consciousness.

I have seen more tears shed on football fields than an East Lynne matinée ever set loose—even have found it necessary to clamp down on team crying before a game. Chicago was highly wrought up before the Princeton game of 1921 at Princeton. The Tigers came on the field and we followed. Suddenly the home team withdrew, for no apparent reason, after a few moments' warming up, leaving Chicago waiting for something like five

minutes. I sensed something unusual about my men, who were huddled together in midfield, and I found some blubbering and talking wildly. I stood by and watched them closely until Princeton came trotting back. "Here they come; now snap into it," I told them. The sudden withdrawal may have been part of the Princeton psychology, but I doubt it. More likely Roper merely had called his team back for a final word. Before the final game of the season, when the team is playing together for the last time, sentiment is unusually strong, and often I have found the men tearful before I opened my mouth in my pre-game talk.

The most ready weepers are not necessarily those who are the most deeply touched, of course. Some men merely have less control than others. Frank Morse, of Princeton, writing in Edwards' book, testified that the team howled dismally in the dressing room after each of the five defeats in which he participated. He quotes Johnny Poe as having said: "This sob stuff gives me a pain, but it's like seasickness—when the rest tune up, it's hard to keep out of it. Besides, I don't want to get a reputation of being too stuck up to do what the rest of the gang do."

Poe was a Richard Harding Davis hero in the life. A surpassing football player, he became a soldier of fortune, to die gallantly in action with the Black Watch at Loos in 1915.

It is told of him when he was a coach at Princeton, although he was a small man, that he would stand without padding and force the heaviest men on the squad to tackle him at full speed. Smacked to earth, he would rise with a "Come on, men, hit me harder," and be a mass of bruises all September.

Dr. Welch, of Johns Hopkins, told me last fall that a friend of Dr. Eliot, when he was president of Harvard, persuaded him to go to a Harvard-Princeton game where Edgar Allan Poe did great feats, which brought him frequent rounds of cheering. Finally, President Eliot inquired of his friend whether young Poe perchance was a relative of the great Poe, and his friend said, "Why man, this is the great Poe."

As far back as the 80's, Alex Moffat, that ambipedextrous Princetonian, had to counsel his mates, after a disastrous first half, to "cut out this blubbering and get to cussing." Jim Hogan, now dead, was captain of the Yale 1904 team, which lost to the Army, after whipping Harvard and Princeton. He broke up a cry fest in the dressing rooms at West Point by exclaiming, "Quit being sorry for yourselves and start figuring out how it happened so that it won't happen again."

After Princeton's defeat of Yale in 1893 one of the Princeton coaching committee held up his arms for silence in the Tiger dressing room at Manhattan Field and said, "Boys, I want you to sing the

doxology." Standing as they were, naked, muddy, sweaty, some smeared with blood, they sang that hymn of praise and glorification without a thought of irreverence, from beginning to end.

Bill Edwards tells of an experience of his coaching days at Annapolis. Rear Admiral Grant was commandant of the academy. The first half of a game with the Carlisle Indians had ended 11 to 6 against the Navy, and Edwards was exhorting the team during the intermission, when the bluff old sea dog burst in and made a blistering speech of his own, built around his opinion of white men who would take a licking from Indians. Smarting under the commandant's quarter-deck language, the Middies went out and won, 17 to 11. Another time, Ingram was coaching at Annapolis. The September day was hot and the squad was listless at workout. One player called for water, then the whole squad stopped and yelled for water.

"Water! Water!" Ingram raged. "What you need is fire, not water!"

In 1897 we won the Illinois game at Champaign in the last half minute of play, after we twice had held them on our three-yard line and defeat had seemed certain. On the march to the Illinois goal, a steady procession of hammering through two and three yards at a time, Gordon Clarke had been used over and over. Illinois had known each time that he was going to carry the ball and pretty well where

he was going to carry it, but he was inspired as players rarely are, and the 147-pound boy could not be stopped. Herschberger had injured his foot in the first few minutes and gone out of the game, a vital loss to us, and Clarke had risen to super heights in this crisis. He was so terrifically wrought up that he was unable to relax after the game. We had training quarters on the top floor of Snell Hall in 1897, and I was so disturbed by Clarke's emotional tension that I decided to spend the night there. He could not sleep, and I finally had to crawl into bed with him and talk the rest of the night with him. I never have known a man so keyed up.

This was no sensitive, flower-like plant. Clarke was the ringleader of the crowd that kept me in hot water in the late 90's, and won our first championship. Though frank and honest, he was a handful, a dare-devil and a bravo. I caught him smoking once on the way to Detroit to play the deciding game with Michigan and had to fire him off the baseball team, costing us the championship that season, as his substitute's errors lost the game.

I keep a tight rein on my own emotions, the result of years of self-control. A coach must keep his mind on the strategy, not the immediate score. To be carried away by either despair or joy would be fatal to his performance. There will be time enough after the game to mope or exult, if he feels like it.

The crying of individual players in the midst of

a game is not a commonplace; but Harry Thomas, Chicago right half, cried from beginning to end of the Ohio State contest of 1922, all the while playing one of the most brilliant all-around games I ever saw. They may cry from general rage or over a specific break in the game. In 1919 Wisconsin scored a touchdown on us in the last two minutes of play. Our captain, a six-foot-four giant lineman, was substituting for the regular safety man, who had been injured. He punted, a Wisconsin man ran the ball back through a broken field and our man missed his tackle. He could not justly be held responsible, for he was unused to the safety position, but he leaned against the goal post and sobbed pathetically.

Had the fault been entirely his, I do not know that I should have taken him to task. I do my utmost to bring the men to the top of their form physically and emotionally for a game, but when it is played I close the book if I can. If a man turns yellow it is another case; otherwise I have no desire to haunt him like the ghost of Hamlet's father the rest of his natural life. I once selected for the highest honor within my power a man who had failed me ignominiously, but not for lack of courage, in a big game, costing us the game. I gave him the award because it was justly his. Despite this one catastrophe, he had deserved the honor more than anyone else.

CHAPTER XIII

A COACH'S CREED

I TAKE my football very seriously, but I try to preserve a sense of proportion. Unnatural rivalry used to be aggravated in the Conference by quarrels over finances. The team managers trusted one another's honor as little as the respective student bodies and teams. The rigid eligibility agreement in the Conference removed one source of poison. We have scotched the tramp-athlete evil, although there is some grumbling over snap courses here and there. Three times a year the athletic directors of the Big Ten meet for a frank interchange, and once a year we have a rules-interpretation meeting. The presidency and secretaryship of these bodies shift alphabetically. In 1922, we made John L. Griffith commissioner of athletics, with a biennial appropriation of $25,000 to defray his salary and expenses. His office is a clearing house for the athletics of the ten universities. There is no more newspaper quarreling between the schools. The Commissioner has done very valuable educational work and has coöperated effectively in upholding the ideals of the Conference.

The number of scouts allowed to a team has been reduced to two, and they are not spies but official observers.

In my time at Chicago I have had three different sets of opponent signals sent me by men interested in Chicago. I said nothing to my team and tore the signals up, unread, in each case; but that day is done with.

One of the earliest important gains for the good of the game made in the Conference was the host-and-guest agreement of which I was the author. This gentleman's agreement first was adopted by Harry Williams, of Minnesota, and myself in 1906 and also signed by Presidents Northrop and Judson. The following season Wisconsin came into the compact, and by 1911 it was universal in the Big Ten. The agreement stipulated that the home team in each case should manage the business end of the game, rendering a detailed statement of receipts and expenses to the visiting team, which should accept it without question.

The night before the Minnesota game the two teams dined together. Much newspaper fun was poked at this purity banquet, but the idea spread. We introduced it to the startled Cornell eleven when they played us in Chicago in 1908. When Cornell came to Chicago for the fourth of that series of games in 1911, however, we discovered that they were carrying a social team for fraterniz-

ing purposes and an entirely distinct squad for playing football. This discovery was made gradually in the course of the dinner, when Chicago players asked to have this and that opponent pointed out to them. The eleven men who played against us the next day and lost, by a remarkable coincidence, all had been detained unavoidably.

The ball belongs to the victor of any game. In case of tie it used to belong to the most belligerent, and battle royals sometimes followed the final whistle. Two teams worked up to big-game tension, with their very souls concentrated on that leather oval, are not always to be snapped back by a whistle to the rational view of it as a routine item of merchandise to be had at any sport-goods shop for twelve dollars. In 1908 Chicago set the precedent of waiving the ball at the end of a 6 to 6 game. Cornell gave us the ball after another 6 to 6 tie the following year, and we gave it to Jack Wilce, now coach at Ohio State, the Wisconsin captain in 1909, after still another 6 to 6 draw. The tension has eased since then, but after the epic 21 to 21 battle with Illinois in 1924, we waived the ball to our visitors.

Old-timers batted their eyes at the spectacle of the Wisconsin student body meeting the Chicago team at the station at Madison in 1908 and dragging the bus to the hotel. In 1910 the entire student body of Purdue met the Indiana team at

the station with expressions of welcome that had been strikingly lacking in previous years. In our 1908 game with Wisconsin, Pat Page was thrown against the fence and hurt. The Badger team, instead of holding him to the two-minute-time-out rule, urged him to take all the time he needed, and Keckie Moll complimented Steffen on a superb tackle at Moll's expense. Two years later Captain Crawley, of Chicago, interceded with Umpire Wrenn to permit Buser, of Wisconsin, who had been disqualified for roughness, to remain in the game.

All this, following on the revolution of 1906, when the life of the sport was in peril, was just a little too good to be true, perhaps. Pre-1906 veterans demanded to know what the game was coming to. They have had their answer. We no longer banquet one another on the eve of battle and it has been some time since we have been given a Brother Elk welcome at the station, but these amenities have served their purpose and there no longer is need for them. Chicago still holds afternoon teas for all visitors in the Reynolds Club after the games.

Prior to 1905 we awarded a new sweater with the C to members of teams at the close of the season of the specific sport, without ceremony. We still give them their sweater and letter as before, but since 1905 we have invested all C men who are

to graduate with a maroon blanket centered with a white C at the annual university sing on the Quadrangle at commencement. As the last event the C men march in in a body, singing their Song of the C, and I enrobe each in his blanket. The ritual is mine, a part of my effort to dramatize the sport. It has been copied widely. The blankets are woven to our order. Each sport is represented by a different-colored star, with black reserved for captains.

The letter system already was in vogue when I played at Yale, but there was no ceremony. If a man played on a Yale team, he wore a Y sweater as a right. The practice varies now with different colleges, but in the Big Three the letter now is reserved for men who have played in the big game of the schedule. One instant in the line-up qualifies, as I understand it, and it is not unusual for a coach to send in men for a moment merely to qualify them for their letter.

In 1904 I organized the Order of the C, the first athletic-letter club ever formed. The members meet once a year at a dinner. Their pledge reads: "We hereby denote ourselves as members of the Order of the University of Chicago C Men, avow our steadfast loyalty to our alma mater and pledge our enduring support of her athletic honor and tradition."

D. R. Richberg, '01, wrote the words and music of the "Song of the C" which is sung at our functions, which runs:

When sight and sound of the campus
Fade in the long busy years,
Yet will return in the memory
Echoes of old songs and cheers;
You, of the field, track and diamond,
Fighters for clean victory,
You who have loved all fair, square sport,
You'll hear the song of the "C":

"Go Chicago! Go Chicago!"
Hear the battle cry!
"Go Chicago! Go Chicago!"
Yours until you die.
She will remember,
You'll not forget her,
Though you afar may be,
Hear her calling, calling to you ever:
Honor the broad, white "C."
Here's to the broad white "C"!

To an honored flag,
To a loyal team,
To "Old Man" Stagg
And his splendid dream,

To the days so rare,
That are gone too soon,
To the game played fair;
'Neath the old maroon!

The award of the C is made by the Board of Physical Culture and Athletics on my recommendation. Occasionally I have denied it to men who played full time in every game and given it to others who served much less. The first class were men whom I had to use for lack of better, but I told them frankly that they failed to qualify in manhood.

With the C goes a code. A man must be an amateur in spirit and in act, disdainful of subterfuge and dishonesty and ashamed to sell his athletic skill. He must be a gentleman and a sportsman, unwilling to win by cheating or unfair tactics. He must train hard and conscientiously and willingly make personal sacrifice to produce the best that is in him, then give it freely and loyally to the team and to the university. Finally he must have attained distinction in his work on a varsity team, or have done a good quality of work and rendered valuable service to the university over a period of two years or more.

I have a form letter of notification which reads in part: "—because of your athletic service to the university, along with a certain measure of athletic

proficiency, your faithfulness to practice and to the rules of training, your fidelity to fair play and good sportsmanship, and your loyalty to the athletic ideals of the university. . . . The honor carries with it the continued responsibility that you live worthily of it, since it represents manly achievement, generous rivalry, good sportsmanship, fidelity to amateurism and loyalty to the university."

A man who subscribes to this creed is not likely to turn professional, and scarcely more than half a dozen C men have travelled that road in the university's history. There is nothing intrinsically dishonorable about it, but a boy who has earned a college degree and his letter ought to have an equipment of character, knowledge and fight worthy of a man's size job, instead of snatching at the first roll of soft and easy money in sight.

I never did a wiser thing than refusing the $4200 a season offered me by the New York Nationals in the '80's, when that sum just about represented the national wealth to me. If it is money that the college man wants he ought to be able to make more on a real job than by peddling a physical skill. If it is fame let him go after a brand that won't turn green and shiny in the seat before he is thirty, and isn't common to beauty-contest winners and local pie-eating, horseshoe-pitching and Charleston-contest medal men.

Just now we are seeing a renascence of professional football which flourished twenty-five years ago in the steel towns of the Pittsburgh region and has fluctuated fitfully since, losing more money for its promoters than it has made. So far there has been no continuity to it, but it is being financed on a new scale now, and the outcome remains to be seen. It is purely a parasitical growth on intercollegiate football, an attempt to commercialize the enormously increased popularity of the college game, and it recruits its players very largely from college ranks. Personally I shall be a bit surprised if it succeeds. Though it came into competition with the college game last season, it usually made money only in cities where Sunday playing is permitted and it is reported that four fifths of the clubs showed red figures.

In the first place football is so indissolubly tied up with college life that I doubt that it can live in professional soil. The spectacle is as much a part of college football as the game itself, and the spectacle is the spontaneous product of the campus. It is youth, incarnate, dramatized. The synthetic counterfeits of collegiate enthusiasms which some professional clubs have been trying to manufacture have been as rollicking as a sinkful of dirty dishes before breakfast.

More tangible is the fact that they mostly play a pretty stuffy brand of football, inevitably. You

may have heard the story of the youngster fresh from varsity romance, ramping about the field on his first day as a pro and being frowned upon by a fellow pro, now four years away from a campus.

"How do you get that way?" inquired the veteran. "You're no hero now; you're just a hired man."

That sums up the professional game and always will, so far as I can see. I have argued all along that football is a sport distinct in character. There is no reason why a man can't play baseball or tennis or run the 220-high hurdles as well for money as he can for love of his college and the sport; but they have no such emotional basis as football, nor do they demand a like physical condition.

Professional football players do not begin to give their all. Men can't be expected to run to arms in defense of their boarding houses. If they are hurt they are off the pay roll usually until they are whole again; a serious injury, and they are done for good. Meanwhile they have annoyed the management by forcing them to scurry up a substitute, for there are no benches of eager subs on the sidelines crazy to get into the game. They are, furthermore, more susceptible to injury, because they are growing older and, as a rule, slacking off in their training. When a man shakes off the emotional compulsions, the close scrutiny and the ethics of college athletics, he cannot be expected to take

training rules too seriously. They call for too many sacrifices and they are not strictly necessary to the professional game.

I know of a former college athlete who should not weigh more than 200 pounds in training. Weighing 250, he is captaining and playing with a professional eleven, and taking tender care of a paunch. The college athlete, with his name on a contract and an assured income in sight, frequently marries at once—another complication. Love of wife and home are admirable social qualities, but they do not stimulate to deeds of high emprise on the football field. I know by general report among coaches and players, and by circumstantial evidence, that a tacit understanding to give the best show they can at the least expense to their bodily comfort is not uncommon to both sides in a professional game.

Football on such terms is a travesty, a Shetland pony rodeo, a vegetarian guzzle. I know the temper of the customers of other professional sports, the hooting, scornful taskmasters who crack the whip over boxers and baseball players, and I wonder.

But my lively objection is not so much to the sport as to its attempt to associate with the college game, and exploit it. Should it succeed, it may easily destroy collegiate football. Once the college game becomes a nursery for professional gladiators, we shall have to plough up our football fields. Now

it is a training in character and a moral asset to the school. The day boys play with one eye on the university and the other on professional futures, the sport will become a moral liability to the colleges. No great thing ever is accomplished without a sustained background of deep feeling. This is the intangible, imponderable underlying motive, the heart interest, of college athletics. The only analogy I think of is love of country. Mercenary troops are serviceable for routine fighting, but when they come to grips with patriots on anything like even terms, they break and run. I fancy that many a fine boy playing professional football has had his moments of chagrin as he contrasted the imitation with the original.

In the Conference we have drawn the line as sharply as we have known how and have made ineligible for any coaching position anyone who has played for hire. That alarm has not extended to the East. Arnold Horween, who became head coach of the Harvard squad last fall, played professional football under the name of McMahon on the Chicago Cardinals up to the time of his Harvard appointment. The Chicago precedent of making a coach a full faculty member at a faculty salary, now almost universal in the West and South, is a healthier condition than competitive bidding for coaches with a record. Harvard, Yale and Princeton have found it necessary to agree to limit a foot-

ball coach's salary to $8000 and the total football salary list to $21,000 a year. The most ever paid a coach, I believe, was $15,000; the present record is $14,000, being paid on the coast—these sums for ninety days' work a year.

I came to Chicago at $2500 a year, refusing $3000 at Pennsylvania, and my salary was not increased for six years. The vision of creating a new kind of department on original lines lent thrill to the adventure. As athletic director, I took the place of a graduate manager, coached the track, baseball and football teams all three, for twenty one years and in earlier years conducted gym classes and made physical examinations. I gave up coaching baseball when our rivals employed football specialists who conducted intensive practice in technique and fundamentals.

I am the athletic chief executive, answerable to the president of the university. That state of affairs prevails today outside of Harvard, Princeton, Yale, California, Stanford and a few other colleges. At California and Stanford the Associated Students, with a graduate manager as executive, run athletics. In the older Eastern colleges there is an alumni committee of great power for each sport. Yale four years ago and Harvard more recently have added a director of athletics, but neither has created a department of physical education in the sense we understand it in the Conference. At Yale,

Tad Jones, the football coach, is responsible to a committee of the alumni and to the captain, who has no little power at New Haven.

I have helped make one contribution to the welfare of intercollegiate athletics, and I ought to have done so for consistency's sake. Athletics being managed and coached by the staff of the Physical Education Department, why not pay salaries to the coaches similar to faculty salaries in other departments? So far the logic was good, but here the break. The department was put on the University budget for required work in Physical Culture, but not a cent given for intercollegiate athletics. They must pay their cost and they did in time, but it took over a decade.

My multitudinous duties required continuously long hours of work, day time, evenings and Sundays, which I have been able to do only through the unpaid, voluntary and sacrificial efforts of my devoted wife. While it was within my power to compel a larger salary, I have never used it and have accepted the salary of my faculty colleagues in corresponding positions. I have talked, written and lived for the principle of faculty position and faculty salary grade for coaches, which I regard as the safest and soundest principle for developing and maintaining healthy conditions in intercollegiate athletics.

Another consistent policy of mine has been to

have men who have received their athletic training at the University of Chicago do the coaching in major sports. This has been true with one exception. My sciatic trouble was at its height in 1907, forcing me to yield the active coaching in base ball, but I still retained track. For the first time, I called upon the services of an outsider, a student in our law school, who had coached at one of the New England colleges. He taught us something new. In our game with Minnesota, he was discovered by a member of our Faculty Athletic Board playing ten men, using a good hitter to do the batting for the regular center fielder. I was busy with the track men across the field. A hurried meeting of the Board sent our apology to Minnesota. I fired the coach instanter, and President Judson dismissed the student, and the team was disbanded.

Coaching is a routine occupation today, with professional schools of its own. Doctor Sargent's course for physical directors at Harvard, including a course on football, was the first, I believe. Since 1906 I have taught classes in football, track and field athletics in the summer quarter at Chicago, but only to regularly enrolled university students. About 1914 George Huff inaugurated his coaching school for all comers, with a faculty of distinguished coaches, at the University of Illinois, and there are half a dozen such today.

This has made for better coaching, and, in turn, for better football the country over. Coaching is the primary factor in football. I should put school traditions second and the raw material not better than third; that is, if two schools of approximately equal enrollment start the football season on even terms physically, unless one should chance to have a phenomenon in its student body. The school with the better, deeper traditions will get the great emotional response from its students. The coaching will tell the rest of the tale.

How to be a good coach is just as much a mystery as how to be a good general or captain of industry. Like all other jobs above common labor and office routine, it requires a native gift, a feeling for the task, for success. An occasional great coach has been a mediocre player and a number of great players have failed signally as coaches. The two jobs have nothing in common except a knowledge of and a love for the game.

The day is past when a coach can be any kind of an old rake and hold his job. Good character, right living, good example, clean sportsmanship, along with good coaching, are more and more being insisted upon by all of our colleges. College faculties are demanding that the coach be interested in the development of the manhood of the boys as well as in creating football players. Unsportsmanlike conduct and dirty tactics are now pretty

generally taboo among our best institutions.

To me, our profession is one of the noblest and perhaps the most far reaching in building up the manhood of our country. As I view it, no man is too good to be the athletic coach for youth. Not to drink liquors, not to gamble, not to smoke, not to swear, not to use smutty language, not to tell dirty stories, to shun loose and silly women—all these should be the ideals of the athletic coach if he realizes his full opportunity for service and his calling to a consistently high and clean personal life. To be fair minded, to deal justly, not to play favorites, to avoid politics, to be honest in one's thinking, to be square in one's dealings, to shun petty and big graft, to give rebuke with justice, not to bear personal malice, not to harbor hatred toward rivals, not to be swell headed in victory nor overalibi in defeat, to be the sportsman and gentleman at all times, to stoop to no unfair practice but to win only by fair means should be the ideal of every coach.

CHAPTER XIV

GALLOPING GHOSTS

FOOTBALL was a long time licking its wounds after the 1906 revolution. The sport was on probation, and that attitude was reflected even in the size of the squads. At Chicago only seventeen to twenty men turned out in 1906, 1907 and 1908—not enough for two teams. Not since our struggling opening season of 1892 had we had such scanty squads, and now we had no high-school teams upon which to sharpen our teeth. Yet we barely were nosed out of the championship in 1906, and we won it in 1907 and 1908.

The forward pass and two brilliant open-field runners did it. This new aerial attack added another dimension to football, as the airplane did to war, and was the most radical advance in the game since five yards in three downs displaced the scrummage twenty-four years earlier. All the other important rules changes in that period had been restrictions; this was a constructive and sweeping addition, even with the lateral limitations with which it was hedged about for the next four seasons. And as someone has said of a six-shooter, the

pass made all men equal. Where small colleges never had defeated great ones and rarely had scored on them, Humpty Dumpty now was apt to be pushed off the wall most any Saturday.

The East eyed it dubiously, in general, and used it timidly when at all. It did not appear in a Big-Three game until the close of the 1906 season, when Yale gained thirty yards on a pass that put the ball on the Harvard three-yard line, from where the Blue pushed it over and won. In 1907 its only effective use in a Big-Three contest was in the Princeton-Yale game, in which Yale, starting the second half ten points behind, drew on it in desperation and Tad Jones made a beautiful pass to Olcott who went to the ten yard line and on the next play Ted Coy took it over on a plunge for the winning touchdown.

The West was not so conservative. To me it came as a life-saver. There was added this year to Eckersall, playing his last season, another Walter, this one named Steffen, a youngster of even more art and finesse in his dodging, for he could run to left or right equally well. This gave me two surpassing open-field runners, the greatest pair I ever had. Properly prepped on the new tactics, they might offset the slenderness of the material from which I had to draw. Reduced to a season of five games, and with Wisconsin and Michigan denied to us, Minnesota looked like our biggest game, and we saved

our best for the Gopher. Rain and mud ruined our chances with a forward pass and open running game and we lost 2 to 4, Marshall, the negro end, place-kicking a goal from the 38-yard line for Minnesota.

But the new stuff we had prepped for them we turned loose the next week on a bewildered Illinois eleven. While they tried to follow the ball, yelling "There he goes!" and "Here he is!" we ran up a 63 to 0 score.

Eckersall was gone in 1907, but Steffen took his place at quarter. His generalship, supported by Iddings and Worthwine in the backfield and Page and Bill Hewitt at ends to take his passes, landed us at the top of the Conference heap. That fighting guard and fullback, Worthwine, now a Boise lawyer, worked his way through school, won the Phi Beta Kappa key, never missed a practice, a scrimmage or a game in three years and never was hurt. We tripped up Indiana, Illinois, Minnesota and Purdue, and lost to Pop Warner's Carlisle Indians 4 to 18 because Houser out-forward-passed us, and because they landed on Steffen so hard on the first kick-off that he was dazed the rest of the afternoon. We used the pass eight times, six successfully, but Carlisle completed eight out of eleven attempts.

Against Minnesota in 1908 I capitalized Steffen's reputation as a deadly forward passer and trained

him in a new strategy, feinted passes. Every time he feinted to throw, Minnesota shifted to cover the decoy receivers. When he had them where he wanted them Steffen showed his heels. It was the first use of the pass as a feint, and we won 29 to 0.

We were allowed seven games in 1908, and though we played only six, Wisconsin was restored to our schedule. It always had been my custom to stress the critical games and to save something special for them. Nowadays there are so many hot tangles on the schedule that it no longer is practicable. We beat Wisconsin 18 to 12, Steffen providing the winning margin by running ninety-five yards for a touchdown on the first kick-off on a pre-arranged play. I had coached him to start straight down the center of the field, pulling the opposing ends in; then arranged to block these ends in. Having an extraordinary player to carry it out, it worked to perfection. Twice since I have tried it with other players for substantial gains, but it has failed to produce another touchdown for lack of a Steffen. It requires a fast and slippery runner and perfect timing.

Cornell was the outsider on our 1908 schedule, the first time we had met since 1899, and we played a memorable 6 to 6 tie. I had planned a series of surprise plays to be run off at top speed in sequence the first time we got the ball, and with them we ran it down to Cornell's five-yard line in the first

few minutes of play. The next play, a sequence, called for Page, a left-hander at right end, to appear in the back field and pass to Steffen, who had gone out near the side line rather naturally on the previous play. On the fourth down, Page threw high, Steffen leaped, but muffed the ball and that ended the drive.

Soon after Cornell kicked, recovered the ball on our fumble and scored a touchdown on a beautiful pass from the thirty-yard line. With less than two minutes to play, we still were behind 0 to 6. Snow, which had fallen before the game, began to come down heavily in the second half, and the day seemed lost, when Steffen, in desperation, cut loose with every trick in our repertoire.

This was the period of the checker board field, when the first man receiving the ball from snapper-back, if he carried it, had to run out at least five yards from center, and when the forward pass had to be thrown five yards out when it crossed the scrimmage line. I had capitalized on Steffen's ability to carry the ball from position close up behind center by planning a series of original plays in which he either ran with the ball, or crisscrossed with Page, right end, who carried the ball around the other end, or crisscrossed with Page, who forward passed to Steffen as he continued outwardly and forward, or crisscrossed with Page, who forward passed to Steffen or to Schommer, at left

end. These three plays figured in the final strategy and score. First Page made thirty yards on a crisscross play. Ben Badenoch at center passed to Steffen, who started to the right as if on one of his famous runs, Page shot around from right end, took the ball from Steffen and skirted Cornell's right.

Shortly after, we pulled strategy number two on which Steffen gained ten yards on a forward pass from Page, and in the last minute of play we tied the score on strategy number three, a double pass, followed by a forward pass.

Steffen at quarter carried the ball as if on an end run, but slipped it to Page, who ran back as if to carry it around the other end as he had done previously on his thirty-yard crisscross run, but here we added a cracker to our whip. John Schommer, left end, had slipped unnoticed beyond the Cornell secondary defense and over the goal line while they concentrated on Steffen and Page, and Page forward-passed into his hands for a touchdown. Schommer kicked goal and we had saved our skins.

Such a triple pass ending with a forward pass play, as center to quarterback followed by a crisscross double pass, quarter to half, followed by a crisscross double pass, half to end, followed by a forward pass to quarter or the off end, another of my inventions that year, is easy to plan on paper but difficult to execute in a game.

Only exceptional players can carry it through to full effect, and in several seasons now I have not had a real forward passer or an unusual open-field runner on the squad. In twenty-one years since the new style game came in, we have had just three great open-field runners, passers and kickers—Eckersall, Steffen, and Pete Russell, of '13 to '15. Pat Page, of that smart 1908 eleven, belongs with the others as a passer, his southpaw adding to his effectiveness.

After Steffen's last game I said—and I have had no reason to change my mind since: "In twenty-five years as a coach and player, I never have seen his like as a dodger in point of cleverness and resourcefulness, supported by splendid speed. In running from quarterback position, I never have seen anyone who could even approximate his ability. He dodges with equal facility either way. He is clever and accurate in forward passing. He is safe and deadly in his tackling. He is unusually strong in catching and returning punts. He is a good punter and drop kicker, and above all he is an inspiring leader and an unsurpassed general."

The only change I would make in this estimate would be to add a tribute to his straight-arm ability, never shown more strikingly than in this Cornell game. He had caught a punt and was scooting down the left side of the field about two yards inside the line when Captain O'Rourke, Cornell's

great tackle, cut across and leaped for him with a high, crushing tackle. Steffen weighed 158 pounds, O'Rourke 200; but the lighter man shot his arm out, caught O'Rourke on his chest, counteracted all the big man's momentum, and the Cornell captain turned over in the air and landed on his back, going the other way. That is stiff-arming!

The graduation of such a player left a gaping hole in our 1909 team. We had enough remaining of the championship crowd, however, to beat Northwestern 34 to 0 in our first game since 1905, defeat Purdue, Indiana and Illinois; but we lost to Minnesota 6 to 20 and tied Cornell and Wisconsin, each 6 to 6.

What was left of the great '08 team graduated in June, 1910, and let us down to a very low-water mark. Dr. J. E. Raycroft, now of Princeton, then of my staff, counted the football eligibles and reached a total of 348. The enrollment at Chicago is deceptive. The total is large, but the summer quarter, when teachers flock onto the campus from coast to coast, accounts for more than 6000 of this.

It is our largest quarter, and with graduate, law, divinity and coed students and other ineligibles, reduces our body of available men even today, with our post-war growth, to somewhere between 1000 and 1200—the least in the Big Ten. This was the only year Indiana ever whipped us. I never worked a line so hard before or since, trying to make some-

thing out of them, but we won only from Purdue and Northwestern, and scored only 24 points to our opponents' 66.

Against Wisconsin that year I first used a forward pass by the quarter, running back from his position and throwing to an end, preceded by a feint attack into the line. Several years before I had devised the pivot deception plays in which the quarter after receiving the ball from center, stepped out and pretended to pass the ball to a bucking half, then pivoted and gave the ball to fullback on a buck on center. Eckersall's three runs to the safety man in the 1905 Wisconsin game was the second evolution and this the third of that strategy. When the defense had been drawn into a knot to combat the apparent assault, the quarter dropped back and passed over the line to an end who had slipped around. We gained twenty, fifteen and twenty yards on the play; but Wisconsin, that season, had a so much stronger machine that it served only to hold down the score.

Knute Rockne has used the maneuver much at Notre Dame, and expanded on it, employing backs as well as end receivers. It was one of the jokers in the repertoire of that back field of several seasons since which Grantland Rice christened the Four Horsemen, Stuhldreher being particularly adept at it. When the Four Horsemen showed their wares in the East the reporters gave Rockne credit for the

formation. The coach, however, generously declined the nomination and has passed it on to me in his lectures before the various coaching schools at which he has been teaching.

I essayed another new trick in this Wisconsin game. The kicker dropping back as if to punt, both our ends lined out as if to cover the kick, but one started moving inwardly and slightly backward. At the right moment he signaled for the ball to be passed, then wheeled and boxed in the opposing end, permitting the kicker to circle that end without dodging for one thirty and several lesser gains. It should have been good for one or two touchdowns, but it failed to carry through for lack of a good ball carrier, as many a bright idea of a coach has flickered out in a game.

I have employed this man in motion principle a lot and in a variety of maneuvers, using it first back in 1896.

In the East, where the forward pass was being used more as a threat intended to scatter the defense than as an actual weapon of offense, the game had roughened up again, with much battering at the tackles. Criticism revived in 1908, increased in 1909, and the National Collegiate Athletic Association, which had grown out of the assembly summoned by Chancellor MacCracken in the 1905 crisis, and which had been perpetuated largely by the efforts of Major—now Brigadier General—

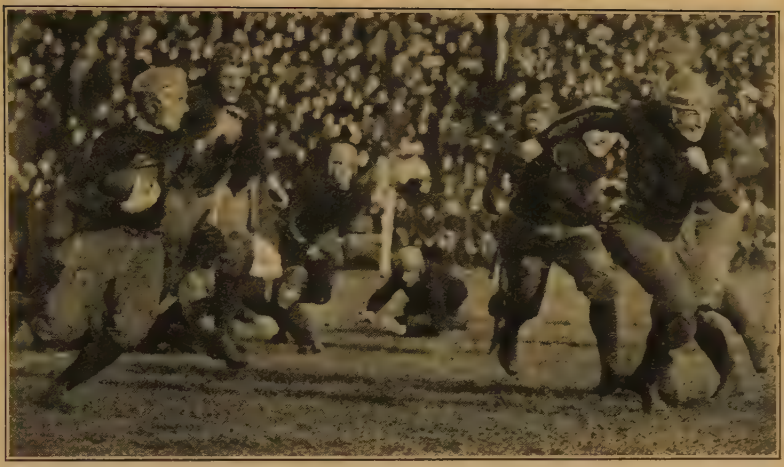
Palmer E. Pierce, referred the problem to the rules body. One suggested reform proposed that the five-yard lateral restriction be removed from the running of the ball by the first man to receive it and from the forward pass. This, along with the abolition of pushing and pulling of the ball carrier, and other tentative changes, involved so many unknown possibilities that the rules body concluded to experiment first—the only instance in which new rules have been tested in the laboratory before adoption. It was suggested that as many coaches as possible conduct experiments that spring of 1910 and report back before summer. Hugo Bezdek, fullback of our 1905 championship eleven, was athletic director and coach at the University of Arkansas. I wrote him asking if he could muster some sort of squad to play football for a week, and the first of March I went to Fayetteville, where we devoted four or five days to testing the proposed rules with Bezdek's men as our crucible.

In May the new rules were adopted and the playing field reverted in the season of 1910 to a gridiron. Unlimited substitution at the beginning of each quarter was restored after a lapse of more than twenty years, the playing time reduced a further ten minutes and the game divided, as in Canada, into four quarters of fifteen minutes each. Seven men on the offensive scrimmage line was made mandatory and other alterations adopted—

the last general shaking up of the rules to date. Since 1910 the sport has known its longest period of serenity; technically it has remained static, except for minor rules changes, while it has been growing out of its old ball-park clothes into concrete stadia.

In 1911 the team that was to win the championship in 1913 began to jell. We lost only one game, but that by the decisive score of 0 to 30, to Minnesota at Minneapolis. They had a powerful eleven, and Chicago stumbled over one of those off days that lurk around the corner for the best. Again in 1912 we lost only one game—that to a splendid Wisconsin championship eleven. They had run up a 53 to 0 score on Purdue, and the student body at Chicago formally petitioned the team to roll up a higher score at Purdue's expense the following Saturday. I stepped in, as I not infrequently have to do, as a kill-joy and predicted a close battle and a small score. I had a light team and few spare parts—no machine for reckless driving, even if I were in the habit of spinning my speedometer just to see it whirl.

Jess Hawley's Iowans had led us 14 to 13 at the end of the third quarter, while I experimented with tactics and tried to win with a substitute fullback in the place of Snitz Pierce, who had a Charley horse. I was forced to send the lamed Pierce in, in the final quarter, and he ripped up Iowa, to win



DOLLY GRAY RUNNING THE BALL BEHIND PETE RUSSELL'S INTERFERENCE

CHICAGO 28—ILLINOIS 7. NOVEMBER 1, 1913

Photo. by Chicago Tribune

A TACKLE ON STAGG FIELD

34 to 14. Hawley drank deep of revenge for three lickings in a row at Iowa when he brought his great Dartmouth team of splendid material, splendidly coached, to Stagg Field in 1925 and whipped us 33 to 7.

Paul Des Jardien, an All-American center, and a pair of mighty tackles, Spike Shull and Goettler, both killed in action in the war, the latter while carrying food to the Lost Battalion, were the bulwarks of the line of the undefeated 1913 team that brought us our first championship since 1908. To Dolly Gray, a great side-stepper at left half; Captain Nels Norgren, a splendid punter, powerful plunger and sterling defensive player and now one of my assistants, at right half; and Snitz Pierce, a real fullback, had been added that season a superb quarter, Pete Russell, to complete as great a back field as ever wore the Maroon.

Our closest shave came from that Purdue team which had been so lowly the previous season, and no one laughed at "Stagg fears Purdue" this season. Two men accounted for the Lafayette eleven's sudden rise to power—the late Andy Smith as coach and the great Oliphant at left half. I suspect that half the Eastern football fans who knew him as Oliphant of the Army still have no realization that he played three great years at Purdue before he set the East afire. In those three seasons he never crossed Chicago's goal line. It was a shame

to stop him, but stop him we had to. He was the bugaboo with which I frightened my children into a tackling frenzy. In this game a Chicago player tackled Oliphant so fiercely that he broke his own tackle and shot under the legs of the Purdue star. Oliphant, who had leaped into the air, came down on his head, bounced to his feet like a rubber ball and, still carrying the pigskin, struck out for his own goal line. Chicago let him run until he discovered his error after ten yards retreat, then downed him on the spot.

That was not the first time, nor the second, that I had seen a man run the wrong way. Babe Meigs, now publisher of the Chicago Herald and Examiner, turned out in 1905, a green youngster. In the midst of the season's first scrimmage I switched him from the scrubs to the varsity. A moment later the scrubs punted. Meigs turned around, charged down the field and tackled his own team mate, Eckersall. Meigs made the varsity that season and distinguished himself in the epic Michigan 2 to 0 game against Octopus Graham.

Three coaches, destined to be great, appeared in the Conference in 1913,—Andy Smith at Purdue, Bob Zuppke at Illinois and Jack Wilce at Ohio State. Smith had only medium success during his three years in the Big Ten but came through with a bang later at the University of California. The coming of Zuppke and Wilce inaugurated the new

THE GREAT OLIFANT WITH THE BALL—DES JARDIEN HELD BY A KNEE BLOCK, ATTEMPTING A TACKLE

principle of year round football coaching specialists, which has been widely copied.

Illinois threw a scare into us that year. At the start of the game, the gifted Harold Pogue caught Captain Norgren's initial punt and dodged brilliantly straight down the field for sixty-five yards for a touchdown. The half ended 7 to 0 in Illinois' favor. I explained our tactical errors to quarterback Russell between halves and the team came back strong and won 28 to 7.

Harry Williams had another potent machine at Minnesota and was expected to whip us. Chicago won 13 to 7, largely by virtue of knowing an opportunity when they saw it and capitalizing it without delay. Early in the game Norgren kicked a corking long high punt. The Minnesota safety man was nervous and fumbled. Chicago was on top of the ball instantly on Minnesota's thirty-yard line. The Statue-of-Liberty play, Norgren feinting a forward pass and Russell snatching the ball out of his hands for a run around the other end, put the ball on the three-yard line in one swoop. Here Russell unlimbered a new play—a feint toward the strong side of the line, followed by a whirl and a cross back to the weak side, which we had saved for just such a moment. Snitz Pierce slid over without a Minnesota hand touching him and we won by that margin.

The season's final game, which we won from Wis-

consin 19 to 0, was the first ever played in which numbers were worn on the backs of the players' jerseys, now a general custom. We pioneered in this for the convenience of the reporters and spectators, and the innovation was greeted so warmly that six days later the athletic directors of the Conference voted that all Big Ten teams be numbered in the first two games of the 1914 season, and that the scheme be adopted permanently if found satisfactory. Illinois, Wisconsin, Northwestern, Purdue and Iowa all numbered their men in their Chicago games in 1914, but Minnesota held out. The only argument against the practice that I can recall was that it was an aid to opposition scouts. From 1915 to 1920 the Football Rules Committee recommended that numbering be adopted; since then it has not only recommended but urged it annually. For several years now numbering has become universal.

The larger part of our offensive strength was graduated in 1914, but we had two promising recruits as partial compensation—Walter Schafer, said to have been the first American officer killed in the war; and Herman J. Stegeman, now athletic director at the University of Georgia.

Schafer must have made a magnificent soldier. He was a glutton for punishment, the type that really loves a scrimmage and grows better the longer he plays. He told me once, "I never can get down

to playing until some fellow gives me a good kick in the head." He was not a brilliant player, but hard and dogged; and he went at the war in the same spirit, leading raiding parties into No Man's Land night after night.

Stegeman was at guard on our 1914 eleven and a quarter and half miler on our track team. He was standing by one spring afternoon while I tried out another quarter-miler. I had fired the starting pistol when I saw that my stop watch was not running. I fired a second shot to recall the man, but he kept on going.

"Better shoot again, Mr. Stagg; I think you missed him," Stegeman contributed.

Such chance as we had of retaining the championship in 1914 was derailed by the injury of Russell's shoulder early in the Illinois game. I had no remotely adequate substitute and was forced to keep him in the line-up just to run the team; but he had only one arm, and Pogue and Pottsy Clark were not to be stopped with anything less than two. This was the game in which we failed to shift back to proper kick-off position after botching my old trick kick-off, and Pottsy Clark galloped the length of the field for a touchdown. I should have liked particularly to top the Conference that season, for the board of trustees had voted to call our athletic field Stagg Field.

The 1915 eleven, captained by Pete Russell,

nosed out Wisconsin 14 to 13, but lost to Minnesota and Illinois. Frank Pershing, a nephew of the general, joined the squad that season. He was elected captain of the 1917 squad, but with most of the team had joined the colors before the season opened. Steve Brody, at guard in 1915, was killed in action in the air service. The last of the old faculty hostility toward athletics expired during the war, in the face of the contribution made in the war by college athletes. I have listed four men of the 1913, 1914 and 1915 football teams who were killed in action, and Chicago suffered no heavier than other universities. But the college athlete did more than die; he lived magnificently, volunteered almost to a man, was accepted to a man because of his physical condition, and usually became an officer by virtue of the qualities that won him a place on the team.

Our lowest ebb since 1910 came in 1916. We lost to Carleton, Northwestern and Wisconsin, and were slaughtered 49 to 0 on our own field by one of Doctor Williams' greatest teams—the worst defeat in Chicago's football history. Yet this Minnesota machine, with a 54 to 0 victory over Wisconsin also on its scalp string, had been defeated by Illinois 9 to 14, while we had whipped Illinois 20 to 7 a week later, and neither result was a fluke. Walter Camp was to be at Minneapolis to see the Illinois game, and the Gophers, in their

eagerness to make a showing before the selector of All-American elevens, overtrained and went stale. Illinois intercepted a pass early in the game, got the jump and kept it.

We journeyed to Champaign as a presumptive burnt offering on Zuppke's altar, and did the same thing to them that they had done to Minnesota. On Chicago's first punt, Dutch Sternaman took the ball and dropped it on McPherson's tackle. Captain Phil Jackson scooped it up on the first bound on the dead run and continued for a touchdown. Our scout had reported that the Illinois right half on defense was accustomed to edge forward toward the line and that it would be possible to get behind him. I planned to do so by crossing over from the opposite side and had rehearsed the play, ordering it to be saved until we chanced to be well toward the left side of the field, but not too close, so that the Illinois safety man would be pulled a bit toward the strong side of the field.

Pershing switched from half to right end on a stealthy back-field interchange, a feint attack was made toward their right, Graham wheeled and whipped the ball diagonally to Pershing, who had slipped past the Illinois half, and he was downed on the nine-yard line. Bat Hanisch, fullback, drove it over for a touchdown on a nine-man line play. Penn worked the same forward pass on us in 1925 for its winning touchdown.

The smartness of Red Graham brought us a third touchdown in the second half. There was and still is a rule that when a kicked ball strikes a player of the side punting, the ball continues in play for the defensive side, which has the option of running with it or putting it down where it struck the off-side player. I had called the squad's attention to the rule and emphasized the option. Illinois punted short, the ball hit one of their linesmen on the leg, and Graham, in a flash, had picked it up and was trotting forward, shouting "Chicago's ball back here!" pointing a finger. When he had trotted past most of the Illinois team he broke and ran for a touchdown.

All this conspired to bring down on us another week later that worst walloping we ever took. Minnesota could not get at Illinois again, but it could everlastingly wipe up the earth with the team that had whipped Illinois. And it did, Bastian and Wyman, one of the greatest forward-passing combinations ever seen in the Conference, presiding.

To this extent, football is not a breeder of generous, trusting natures. A certain skepticism becomes the smart player. He takes nothing for granted. When the ball crosses the goal line on the kick-off it is not dead until the defensive team has touched it down back of the goal line. They almost invariably touch it down and bring it out to the twenty-yard line for a kick or a scrimmage, but

they can run with it if they like. This used to be true of tries for goal and other kicks. In the Army-Yale game of 1902, De Saulles of Yale picked up the ball after Charley Daly of the Army had tried for goal and failed, and strolled out with it. As he passed the twenty-five-yard line, an Army player appealed to the referee. "Isn't that ball down?" Being appealed to, it now was open to him to talk, and his answer was, "No." The army man yelled, "Free ball! Free ball!" and set out in pursuit. De Saulles already was in full flight. The Army, which had lined up to receive a kick, pulled him down on their twenty-five-yard line and the game ended 6 to 6.

The war scuttled our squad in 1917, but with three veterans to nine, we held Illinois 0 to 0. An error of the referee, the only instance of the kind in my experience, all but beat us. At a critical moment he gave Illinois a fifth down, refusing to accept the head linesman's word that they already had had their quota. Illinois employed the fifth down to try for a goal that missed.

Conference football was suspended in 1918 by a Conference faculty order, for if the sport was to be played at all, it would be by army teams immune to the usual eligibility rules, inasmuch as all students were members of the Student Army Training Corps. Ours lived in barracks beneath the stands on Stagg Field under military discipline. I

had begun to whip a fairly good team together when most of them were called to the colors. To fill the dates already scheduled, we had to conjure up a new team composed principally of freshmen, and we lost every game. The success of these S. A. T. C. elevens depended very largely on whether the local commandant happened to be a football fan or not. Those who were saw to it that no bugle calls interfered with practice, and first-rate teams resulted. Elsewhere the squad's life was not a happy one.

We lost the final 1918 game with the Minnesota S. A. T. C. team by the failure of our quarter to follow his orders. With a string of defeats behind me, I made a desperate effort to win this closing game and devoted the whole week to a new set of formations, including one I called Formation B, or the Go-Whoa-Hep. On Friday I went over the field and our plays with the captain and quarter, giving him his orders, and emphasizing particularly that Formation B was to be called on the first time Chicago got the ball as far as its own thirty-five-yard line. I renewed this instruction particularly in our last talk before the team took the field. Luck was with us. The Minnesota kicker stubbed his toe on the kick-off and we recovered the ball on our own forty-yard line. Instead of using Formation B, the quarter began working the stuff we had used all season and did not try the Go-Whoa-Hep until

almost the end of the first half. On this first and only attempt we made eleven yards. In the intermission I gave him what-for. A complete change came over Chicago's play in the second half, but it was too late.

Michigan returned to the Conference after years of effort on the part of the faculty at Ann Arbor and friendly overtures from the confederation from which she had seceded, the influence of Coach Yost turning the scales. We wished to do our part in spreading the welcome mat and dropped Minnesota to make a place for Michigan on our schedule.

The boys came marching home again in 1919 to give us a team that lost only to Illinois and Wisconsin. The Iowa game closed with a burst of fireworks in which Aubrey Devine, one of the immortals of Conference football, all but whipped us. In his anxiety to cover his opponent on forward passes, our left end let the Iowa right end lead him a wild-goose chase, while Devine, feinting at passes toward our right, like Steffen eleven years earlier, got away three times around our left.

In three successive plays in the final minutes of the game Devine carried the ball from the Iowa forty-yard line to our thirty-two-yard mark. I sent in Hinkle to relieve Halladay, and in his excitement he presented Iowa with fifteen yards more by yelling "Fight, men, fight!" before the first play was

called—the penalty for a substitute speaking until after one play. The rule was written to prevent a sub from carrying in orders from the coach at a critical moment, and was intended to apply only to the side in possession of the ball; but the next season it was made all inclusive, as interpreted by the umpire in this instance. The penalty put the ball on our sixteen-yard line, from where Iowa swept it on in two plays to the two-and-a-half-yard mark. Here Chicago stood like Stonewall Jackson and the whistle blew for the end of the game with the ball on the one-yard line and fourth down, the score 9 to 6.

No such luck in the Wisconsin game, which we lost in the last minutes of play on a brilliant run from a punt for a touchdown by Allen Davey, Wisconsin sub quarter. The game stood 3 to 3 and we had had a shade the better of it. Chicago concluded that it could not win and would have to be content with a tie. Playing with that spirit, they lost. Davey was the type of player who is dropped into a game in a crisis in the hope that he will break it up, and he did magnificently. He got away from our loafing linesmen to a flying start and dodged the rest of his way. Bobby Cole, our regular safety man, had been injured after booting the field goal that gave us our only three points, and Captain Higgins shifted from the line to safety. He tried desperately to stop Davey; but,

unused to the position, and confronted by a brilliant runner, he failed.

The reverse of the 1919 Wisconsin-game spirit made a weak team magnificent on defense in 1920 —in some ways the best defensive team I ever had, despite the fact that it lost to Ohio State, Illinois, Wisconsin and Michigan and won only from Purdue, Wabash and Iowa. Our back field was not strong, to begin with, and we had lost heavily by injuries in midseason. Many teams, when they have lost their drive, turn philosophers and ask "What's the use?" But this comparatively feeble eleven, led by its fighting red headed Captain, Colville Jackson, a younger brother to Captain Phil of the '16 team, and also called "Red," retreated like the British from Mons. A field goal that hit the crossbar and wabbled over was the margin by which a strong Illinois machine nosed them out. Wisconsin won by a like 3 to 0 score, and a great Ohio State eleven, Conference champions in 1920, as in 1916 and 1917, shaded us 7 to 6 in a heroic rear-guard action. This was our first game with Ohio State. We caught a Tartar then, and it hasn't grown any more docile since.

They gave us our only defeat in 1921, to spoil a record of beating Northwestern, Purdue, Princeton, Colorado, Illinois and Wisconsin. Jack Wilce, the Wisconsin 1909 captain, to whom we had waived the ball after a tie game, now the Ohio

State coach, beat us 7 to 0 on one of the prettiest bits of strategy that ever sent me sprawling. We began like a prairie fire, taking the ball on our eighteen-yard line on Ohio's first punt and sweeping it seventy-four yards down the field with as brilliant and diversified an attack of line plunges, forward passes, end runs and tricks as I ever saw inaugurate a game. On their eight-yard line, second down, our quarter called for a forward pass from a half to himself at a point over center. The quarter, however, made a change in the position at which he was to receive the ball, to meet a temporary condition, and failed to make the shift plain to the half. The latter shot the ball to the usual spot, the quarter was not there, the ball hit the ground over the goal line, became forfeit to Ohio, and we never did score, although we held the edge until the fourth quarter.

In the final quarter the situation was exactly reversed, and Ohio State marched brilliantly down upon our goal. It is difficult to describe Wilce's strategy adequately on paper; its perfection lay in the way he set the stage. Ohio led up by a series of end runs and forward passes all to the right. On our fourteen-yard line they feinted to the right again, the ball carrier did a whirl maneuver and went right through our weakened left for a touchdown.

Two of my former players had seen Princeton

in action and detailed the Tiger defense in advance of our game at Princeton. I concluded from these reports that the line was their weak spot and prepped for a line of offensive. We used three fullbacks, Timme, Thomas and Zorn, to which Princeton added, "We wish they'd never been born." Thomas and Zorn were playing their first year. Timme averaged five and a quarter yards, and Thomas five and a half yards through the Tiger line, which was cleverly opened up between guard and end by Captain McGuire and Crisler on our right side, and by Fletcher and Strohmeier and Halladay on the left. Bobby Cole, our left half, did himself proud too. A touchdown on a forward pass and a field goal by Romney won for us 9 to 0.

Though we won the Illinois game 14 to 6, the field at Urbana was muddy, we played listlessly in the first half and Illinois got the jump. In the first quarter Sternaman of Illinois kicked a field goal. In the second quarter Romney slipped in punting and the ball angled off fifteen yards to the left, straight into the arms of Peden, an Illinois half, who ran it back sixty yards to our twenty-five yard line. After failing to gain through our line, Sternaman dropped a perfect drop kick over the bar for a second field goal and the half ended 0 to 6 against us.

Between the halves we gave the team a blistering stage talk, singling out two men in particular, both

of whom had taken it easy. A transformed Chicago eleven took the field in the third quarter. Too muddy for flashy running, John Thomas, the fullback, carried the ball on virtually every play and hammered through for two touchdowns. Illinois knew that he would carry it and could guess pretty closely where, just as in the case of Gordon Clarke against the same school in 1897, but like Clarke, he was not stoppable.

Coach Zuppke is a painter by avocation. He was coming down heavily on camouflage in these years and experimenting with jerseys and headgear in the exact shade of orange of the new football. At once one of the most ingenious and most fantastic of coaches, he overlooks no conceivable angle of a game and mixes more psychology medicine than the chair of psychology itself. One of his precepts, I have heard, is that a quarterback should not have a long nose. Pete Russell, our quarter from 1913 to 1915, had played at half on the Oak Park High School eleven when Zuppke coached it. When I put the boy at quarter Zuppke told someone that Russell's nose was too long for the position; it would obscure his vision.

A hot battle with a notable Wisconsin team, which we won 3 to 0 on Romney's field goal with only three minutes remaining to play, wound up 1921. Wisconsin, with Elliott and Rollie Williams, the latter one of the greatest ball carriers the Big

Ten has known, began invincibly, carrying the ball sixty yards down a soft field without a stop to our eight-yard line, where Williams fumbled and Timme fell on the ball for us, and the parade never got under way again. Fritz Crisler, now an assistant in my department, the man who with Captain McGuire had boxed Stanley Keck so effectively at Princeton, played one of the greatest games at end in my experience.

If we have not been highly spectacular, these final years of the story conceal no anticlimax. Our postwar record, 1919 through 1926, of 24 Conference games won, 15 lost and 5 tied is next to the highest in the Big Ten, and we stand at the top in the defensive percentage column on points scored against us. . . . Since 1921 we have won one championship and produced a second unbeaten team; but what the records fail to show is that more desperately thrilling football has been crowded into these years than in any like period of our time, including at least two as hair-raising battles as ever left a crowd limp and ragged, voiceless and nerveless. The first of these was the Princeton game of 1922, the second the melodramatic 21 to 21 tie with Illinois in 1924—and almost any game with Wisconsin or Ohio State in this period would do for a third.

Chicago held a lead of two touchdowns in the final quarter of the Princeton game and lost 18 to

21 in a mad, wild last twelve minutes into which enough heart palpitation for forty games was packed. It ended with Chicago only a yard away from the winning touchdown, the crowd shrieking "Hurry! Hurry!" and our quarter, confused in so desperate a crisis, hammering futilely at the Tiger's center. Never before or since has a Chicago team lost a game which it had tucked away safely. It was no sudden collapse on our part, nor any fabulous rally by Princeton, but we lost as effectively as if our line suddenly had dissolved under Princeton's assault.

Fortune played with Princeton from the start. On our first punt, our right end, the stalwart Dickson, was clipped, and suffered a hurt knee that slowed him up in the first half and took him out the second, forcing Strohmeier to shift from quarter to end, a substitute general taking his place at quarter.

To this loss of leadership was added the injury of Captain Lewis, taking him out of the game. Princeton scored its first touchdown at the beginning of the second quarter—a beautiful, long forward pass bringing the ball to our seven-yard line. Here the injured Dickson took overtime out, costing us a two-yard penalty. That additional two yards gave the touchdown, for Princeton barely shoved it over in four attempts.

We could have spotted them that touchdown

easily enough, for John Thomas, with his brother, Harry, and Jim Pyott, had ripped the Tiger line to shreds and marched sixty yards in the first quarter for our first score, the bulk of the attack going inside the defensive tackles. We added a second touchdown early in the second quarter and a third near the end of the third quarter without once using a forward pass, and demonstrated a decisive superiority that left the result in no apparent doubt. The team was amply supplied with wide formations, and one of our errors in generalship was in not having used them in the second half, when the Princeton line had closed in tightly to combat our slashing direct attack. I had given a special triple pass for such a contingency, with the combined utility of gaining ground around end and throwing the fear of it into the Tiger ends and tackles, but it never was used.

When John Thomas had carried the ball over a second time, I sent in Zorn, who forgot himself and spoke to Harry Thomas, bringing on a fifteen-yard penalty that enabled Princeton to kick off from our forty-five-yard line. The total of these pin pricks began to mount ominously. Then the Tiger smartly pulled a screw kick-off for eighteen yards to their right, recovering the ball less than a yard from the sideline, and a forward pass quickly put it on our twelve-yard line. We stopped them there, but it enabled them to hold us well inside

our own territory the rest of the second quarter.

When I was in New York for the rules committee meeting in March, 1923, I dined with Johnny Breathed and Herman Stegeman at the D. K. E. club. In talking over this game, Johnny said that he had been at the Hotel McAlpin, where the New York alumni of Princeton and Chicago were getting the returns over a special wire. In the second quarter the announcer had read off the report something like this: "Thomas, five yards; Thomas, six yards; Thomas, five yards; Zorn substitutes for Thomas; Zorn makes seven yards; Zorn, eight yards."

"Take out Zorn and put back Thomas," pleaded a Princeton voice.

Pyott opened the last quarter auspiciously with a smart fifteen-yard run. Princeton stiffened on her forty-yard line and Chicago kicked. Gorman caught the ball and attempted a daring back pass to Cleaves, who was posted wide, but the pass was thrown forward, making it illegal, and Princeton was set back to her two-yard line on the penalty—and we were leading 18 to 7, with the end not far off.

A second time the Tiger outsmarted us. Instead of punting, and in the face of the disheartening failure of the previous play, they passed to their quarter, who was out in end position near the east sideline, and he ran it out to the forty-yard mark. The tide turned swiftly here. Had Princeton

kicked, it would have been Chicago's ball on our thirty or thirty-five-yard line probably, and we could have resumed the march possibly to a fourth touchdown. Instead, Chicago next got the ball on her own forty-two-yard line, when Princeton was forced to kick. King, our center, was hurt. A substitute took his place. On the first play he passed inaccurately to Zorn, the ball bounded off Zorn's shoulder and bounced into the hands of Gray, the Tiger left end, who, without having to check or swerve to take it, continued in full flight for forty-three yards and a touchdown.

The score was 18 to 14. A twenty-three-yard pass by Princeton carried the ball to our thirty-three-yard line. Strohmeier, playing left defensive half, used his left hand on a Princeton end who was leaping for an out-of-range pass, giving the ball on penalty to Princeton on our fifteen-yard line. They made four yards, and on the next play gained five more on Chicago's off-side play. From the six-yard line Princeton carried it over by an eyelash in four downs. Chicago was behind 18 to 21 and time almost up.

Running the ball back to our thirty-four-yard line from kick-off, we cut loose with the neglected forward pass, and intermingled with five line bucks, swept it down on the Princeton one-yard line in a little more than two minutes. On this sweep Chicago completed four forward passes, the

last one, Pyott to Strohmeier for twenty-two yards, carrying the ball to the six-yard line. The attack was irresistible, but suddenly our tactics changed. Twice I had talked to the squad of how we failed to win the 6 to 6 game with Pennsylvania in 1899 when the quarter hammered at the Penn center three times on two different occasions with only a yard to go. To the quarterbacks I had stressed the extreme inadvisability—the virtual prohibition —of using a drive on center unless it was a comeback after a shift or a drive over the line.

But with the frenzied crowd screaming a prayer for haste, in the belief that only seconds remained to play, it was not strange that the quarter forgot his training and listened to instinct, which whispered that lying old fallacy that the shortest distance between two points is a straight line. Princeton defended magnificently, and John Thomas butted his head into a stone wall. They had a smart and able team and played brilliantly the tricky, daring strategy of their great coach, Bill Roper. No other athletic event in my memory so depressed the university as a whole for so many hours.

We went out two weeks later with blood on the moon and whipped Ohio State 14 to 9, but we broke more than one suspender in the doing. Both teams had taken a Saturday off and given two weeks to preparation. Ohio State had been spread-

Photo. by Chicago Herald & Examiner

JOHN THOMAS PLUNGING THROUGH THE PRINCETON LINE

CHICAGO—PRINCETON, 1922

Photo. Wide World Photos

A PRINCETON FORWARD PASS

forward-passing the Conference to death, so we concentrated on a spread-formation defense.

Wilce feared our line attack most, and devoted his time to perfecting a tight box defense against John Thomas, our plunging fullback, which slowed up John, but did not stop his brother Harry.

Wilce crossed us up by using no spread passes, but while his line pulled in to stop our plunging offense, Strohmeier cleverly mixed passes and shifts and beat them at their own open game. It was an uphill battle all the way for us. I had suggested to the team that we make a desperate effort to gain before kicking if the ball was downed in our territory at the outset.

Our center made a bad pass to John Thomas on the first play, the ball glanced off Thomas' shin and Ohio recovered it. Workman dropped a field goal from the thirty-five-yard line and we were behind. Ohio added a touchdown in the third quarter, when our left end was clipped from the rear as he was about to tackle Workman, dislocating his elbow and permitting Workman to get away for twenty-five yards. A forward pass took the ball to our four-yard line, from where they smashed it over.

Wisconsin always gives us a battle, and Chicago had lost its drive after so hard a season and failed to rise to the occasion in the final game. It ended

0 to 0. Our percentage in the Conference standing was 1000, as was that of Iowa and Michigan, but they had won all their games.

The day before the 1923 Illinois game we lost Harry Thomas, our right half, by ineligibility and that cost us the game. That Friday night I kept the team out until eight o'clock under the electric lights, trying to teach John Thomas to play Harry's position, and that, perhaps, was a blunder on my part. We had a rule that every three weeks a report must be made on the men and anyone back in his work became ineligible. Harry had missed an examination through illness.

The 0 to 7 defeat took us out of the championship scramble and left Illinois and Michigan in a tie for it, though we had tumbled the Michigan Aggies, Colorado Aggies, Northwestern, Purdue, Indiana, Ohio State and Wisconsin. In the Ohio game Workman kicked from his own goal line and the ball travelled over our goal, the only time I ever saw it done. The Wisconsin contest, ending the season, was a pretty tangle. Both teams were keyed up and both expected to win. Five of the Chicago varsity were playing their last game, while Wisconsin believed she had been cheated out of the Michigan game the previous week

Jim Pyott ended his career here in the most dramatic climax that I recall a Chicago captain ever writing for himself. About the middle of the

seccond quarter, Chicago having worked its way from its own forty-five-yard line to within sixteen yards of Wisconsin's goal, quarterback Abbott called for a triple pass which was to end with left end Lampe receiving the ball on a back pass from Pyott; but Pyott, observing that the Wisconsin left end was planning to cover Lampe, cut through sharply on the inside of him, dodged the man backing up the line, reversed and outran the defensive right half who had been pulled over on the play, and made our first touchdown.

Again in the closing moments of the game, Curley called for a wide run to be followed by a forward pass, Pyott making a beautiful running pass that netted forty yards to Harry Thomas, who first dashed down to the right, then cut inward, receiving the ball and carrying it to the ten-yard line. At this juncture Pyott's lightning-fast thinking gave us a second touchdown. Starting, as previously, on a wide run to be followed by a forward pass, he noted that the Wisconsin end had dropped back to cover. Keeping the ball himself, he dodged and outran two or three of the enemy and crossed the goal line again, with the winning score.

When Wisconsin had tied the score earlier in the game, they produced a baked-clay mold, or tee, from which they tried for goal and extra point, and failed fortunately—the last example of the ancient sport of beating the rules, which only said,

in this case, that a player may scrape up the loose dirt in the vicinity for a place kick. The rules committee outlawed all tees that winter, and to nail it down, barred the usual kick-off mound of loose dirt.

Missouri, an outsider, started us off with a 3 to 0 defeat in 1924, our last championship year. A fine team and further advanced than we were, they got the ball on a blocked punt and kicked a field goal. We had blocked three of their punts, but never near their goal line. We won 19 to 7 from Brown in our first game since the 1899-1900 duet and had rather an easier time of it than the score indicates. The confusion of the referee gave them their only score. Harry Thomas had kicked from the thirty-yard line, Brown blocked the kick and the ball rolled to about the fifteen-yard line, where Thomas fell on it, but the referee gave it to Brown, four plays, the last a pretty twelve-yard run by Keeter resulting in a touchdown.

We defeated Indiana 23 to 0 and went to Columbus for our annual Greek versus Greek affair with Ohio State, ending in the usual 3 to 3 tie. They kicked a field goal early in the game and we sweated the balance of the afternoon to overtake them, tying the score in the last thirty seconds of play—the tightest last-minute squeeze out of which a Chicago team ever pulled. As the last minutes of the game ticked off, Chicago worked

the ball slowly toward the Ohio goal. Using a quadruple pass toward the wrong side, we carried it to the twelve-yard line, but badly to one side of the goal posts. Thirty seconds to play. I relieved Burgess at quarter and sent in the nervy Bob Curley to kick. From that forbidding angle, he drop-kicked the ball over and saved our bacon.

Our 1923 game with Illinois had formally opened their stadium. The dedication waited on the Michigan-Illinois 1924 game, and Grange took the ceremonies in charge in person. In twelve minutes he scored four touchdowns against a mighty Michigan machine, the most spectacular single-handed performance ever made in a major game. On successive Saturdays, Illinois smashed Michigan 39 to 14 and Iowa 36 to 0. Up to the Chicago game, Grange had carried the ball seventy-six times for 795 yards total that season, an average of more than ten yards. This was the prospect that faced a presumably ordinary Chicago eleven.

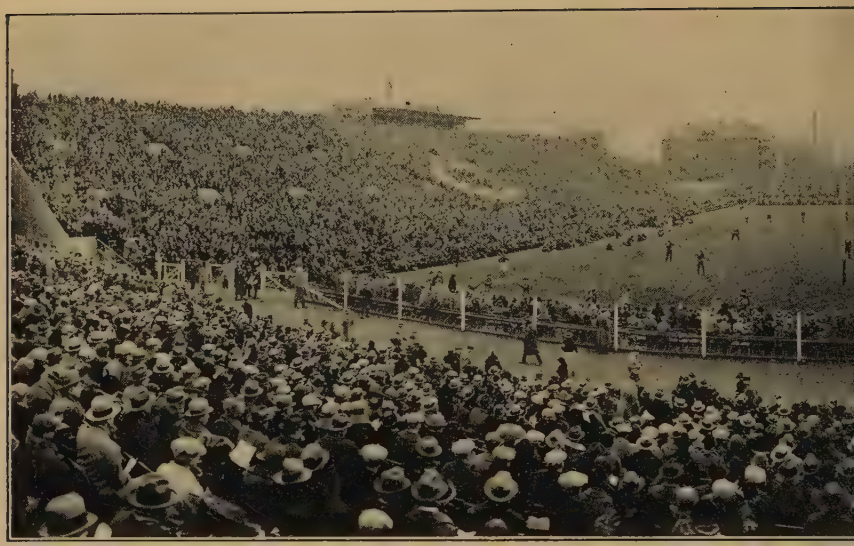
More than 65,000 had attended the Michigan-Illinois game in Urbana, a town of 12,000, more than 100 miles from the nearest city. Our capacity at Chicago was only 32,000, and Illinois would have been happy to fill that many seats themselves. Their stands wore a festive, picnic air. As gay parties of congressmen and their ladies jogged out from Washington to grace the First Battle of Bull Run and applaud a rebel rout, so came Illinois to

Stagg Field. In the face of the Iowa and Michigan games no one asked who would win. The barbecue pits were dug, the fires were banked, and it was no secret who was going to provide the meat. The dopesters were concerned only with whether Illinois would equal the 49 to 0 smearing Minnesota had applied to us in 1916 or set up a new record in Chicago humiliation.

Our own stands whistled with a grave-yard valor in expectancy of a galloping ghost popping out from behind the first tombstone, and held grimly to their Maroon balloons which carry the tidings of a Chicago touchdown aloft at big games. I never had doubted that we had a chance, and I had the team believing in itself. Mrs. Stagg's mother, now eighty-nine, our oldest rooter, who sits just beneath the press stand, had no doubts. Mrs. Stagg herself, who sits in the press box and makes a chart of each game for me, believed. I cannot speak for more than these. For strategy I fell back on that good old military aphorism indorsed by Papa Foch—the best defense is an attack. Not for us the negative "Stop Grange!" The command was "Forward! Get the jump! Attack! Attack! Then attack some more!"

In a running account of the game, Robert M. Lee wrote:

"They are kicking off. What's happening? The Chicago grand stand rises like a blanket suddenly inspired. Then it sits again. Now it is up again.



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THE KICK-OFF IN THE HOMERIC ILLIN

© *Kaufmann & Fabry Co.*

THE TWENTY-NINTH ANNUAL ARMY-NAVY

THE CROWD IN THE PICTURE IS THE LARGEST KNO

ICAGO GAME OF 1924. SCORE: 21–21

OLDIER FIELD CHICAGO, 1926. SCORE: 21–21

ERICAN FOOTBALL HISTORY—110,000 PERSONS

Now down, once more up, up, up; and yelling ladies and gentlemen, like so many furies suddenly released upon a hateful world."

"This, then, is what happened: McCarty, he of the white 5 on his broad back, went through that Illinois line for fifteen yards. It is the same Illinois line that held Michigan and Iowa and all the rest of the noble football machines that now strew its wake.

"They form again. McCarty goes through for another fifteen yards.

"They form again. McCarty goes through for seven yards.

"They form again. McCarty goes through for eight yards.

"Again. McCarty goes through for three yards.

"McCarty goes through to the six-yard line.

"McCarty goes through for a touchdown.

"Play that on your big bassoon."

Less dramatically, but in more accurate detail, this is what happened: Britton kicked off. Hobscheid of Chicago ran the ball back to the Chicago thirty-yard line and McCarty made fifteen yards and first down on the Illinois forty-four-yard mark, Grange bringing him down. Again McCarty smashed the line for twelve yards. Eight times he crashed through for a grand total of fifty-six yards, Harry Thomas and Kernwein contributing the balance of that sixty-seven-yard drive to the four-

yard line. The brilliant attack failed here when the hard-hitting fullback fumbled, and Britton punted out at once. Our hearts sank at that fumble. It is not often that such a drive can be restarted.

Abbott ran the kick back to the thirty-yard line. Kernwein was used once and McCarty three times, the Illinois guard and center positions yielding steadily until Chicago had first down on the Illinois nineteen-yard line. Thomas smashed four yards through right tackle, then McCarty ripped through center on three successive plays to the one-yard mark, then over for a touchdown. Bob Curley replaced Abbott at quarter and kicked the goal. Chicago 7, Illinois 0.

A deathlike hush had fallen over the Illinois stands from McCarty's first plunge, to lift for a moment with a great sigh of escape at the fumble on the four-yard line, then descended again.

McCarty was called to the sidelines for a rest, Marks replacing him. Britton kicked off over the Chicago goal line, and from the twenty-yard mark Chicago advanced past the center of the field without a sign of being halted. Harry Thomas broke through left tackle for one gain of fourteen yards, Kernwein and Marks smashing the line for the other gains. Now Kernwein skirted right end until he was run out of bounds on Illinois' seventeen-yard line. In two plays Thomas made first down through tackle to the five-yard mark. Kernwein

gained four yards at center. Marks battered at center, but gained only thirty inches instead of thirty-six as the period ended, third down and six inches to go. On the first play of the second quarter, Thomas went through for a touchdown. Instead of kicking goal, Curley forward-passed to Barnes for the extra point. Chicago 14, Illinois 0.

Up to now Illinois had not carried the ball once. Where is Grange? Here he is and there he goes! On successive plays the galloping ghost ran the ball down the field on forward passes for Illinois' first touchdown. Chicago 14, Illinois 7.

Chicago kicked off. Illinois failed to gain and was forced to punt. From that punt Chicago set sail on another touchdown cruise. A forward pass, Thomas to Cunningham, gained twenty-eight yards to the Illinois eighteen-yard line. Closer! Closer! Closer! Francis, now at fullback, went over. Chicago, 21, Illinois 7.

Illinois took the ball on the kick-off. There goes Grange again! Again! Again! The ball now is on Chicago's seventeen-yard line. Grange dropped back and down on one knee as if for a place kick. Britton stood behind him as if to kick. The ball was snapped to Grange, who tossed it back to Britton. What's this? Britton passed to Kassell, at right end. Kassell shot it to Grange, by now skirting Chicago's left end. A beautifully executed quadruple pass had gained thirteen yards, and there remained only

four to go. On the next play Grange slipped far out and around for a touchdown. Chicago 21, Illinois 14. The second period ended soon after.

In the third period Coach Zuppke had changed his defense to a back-field box, the same defense Ohio State had used against us for two seasons, and he checked our attack. Grange failed, then Chicago failed through the line. An off-side play soon forced Illinois to try for a field goal. Britton missed. Chicago failed through the line again, then uncorked a quick kick over Grange's head. Thomas and Barto pursued and nailed Number 77 on his own twenty-yard line. But there he goes again! Momentarily winded by the chase, Barto at right end failed to go through hard on the next play, Grange skirted his end and aided by the well planned blocking off of our safety and off-half by Illinois charging linemen, snaked his way down the field for the tying touchdown. Chicago 21, Illinois 21, and the third quarter not yet over.

Britton kicked off and sent the ball clear over the Chicago goal posts—an extraordinary kick. The ball going into play on the twenty-yard line, Chicago gained on two downs, was held on the third and punted to Grange, who was stopped in his tracks. Soon Britton tried for a place kick and the ball shot under the cross bar. McCarty was inserted and made seventeen yards in three tries, and the period ended.

GRANGE UNDER WAY TO HIS SECOND TOUCHDOWN

CHICAGO—ILLINOIS, 1924

Five-yard McCarty was off again. He ploughed through center for first down. Thomas burst through tackle clear to the Illinois forty-yard line. McCarty and Thomas alternating, ground at the Illinois line, and made another first down on Illinois' thirty-yard mark. Gaining only three yards in two tries, Thomas passed to Curley and Grange knocked the ball down. Curley tried for a field goal. Gallivan returned the ball to the Illinois twenty-one-yard line and Grange immediately dashed twenty-six yards before being run out of bounds. On his next sally Grange was spilled without gain. A pass, Grange to Britton, failed, and Britton's attempt at a sixty-five-yard place kick was short ten yards.

Chicago gained seven yards through the line, was held, then kicked. Grange turned the Maroon right end for nine yards and Schultz hit center for seven more—one of the rare gains through the Chicago line. Goodman intercepted Grange's pass on Chicago's thirty-six-yard line. Thomas took the ball twelve yards in two smashes and Francis broke through right tackle. He passed Grange and was on his way to a touchdown when overtaken by Muhl from the rear. First down on Illinois' twenty-five-yard line. Thomas failed at tackle. Francis made three yards, Thomas two yards, then Schultz intercepted Kernwein's pass on Illinois' eleven-yard line.

Grange broke loose once more for fifty yards,

but Ray Gallivan, substituting for Hall, held his Chicago opponent in his excitement and Grange's run was killed. The penalty put the ball on Illinois' one-yard line, a minute to play and the score tied 21 all. Illinois risked all and started passing. One, Britton to Gallivan, carried the ball out to the fifteen-yard mark, but the others were not completed, and Britton punted forty yards to Curley as the game ended.

Taken all in all—the expected one-sided victory, the over-shadowing reputation of Grange, the irresistible sweep of Chicago from the kick-off, the tremendous upset in the first quarter, the seasaw in the second quarter, Grange's magnificent response in which he brought the Illinois score from 0 to 21 virtually single-handed, the breathless dead-lock in the final quarter, with both teams narrowly denied the winning touchdown, made it one of the greatest football dramas ever played on any field.

I make a practice of calling on the winner and congratulating him after a game. There was no winner here, but I felt that either side in such a scrap deserved felicitations. When the 32,000 had tottered out of the stands, destroyed in voice and nerve, I stopped in at the Illinois quarters and said, "Zup, I want to congratulate you and your team. It's a grand team and worthy of its coach."

But Zup was in the mood of Gil Dobie after the Cornell-Penn game in 1924. Gloomy Gil teaches

WALTER CAMP CONGRATULATING COACH STAGG

AFTER THE CHICAGO-ILLINOIS GAME, 1924

in the coaching school at Illinois. Zuppke had seen the Penn-Cornell contest and went around to say a word to Dobie after the game. He found the Cornell mentor off to himself, immersed in his proverbial gloom.

"Don't take it to heart, Gil," Zuppke said. "Your team played a great game." Dobie shook his head. "Why, your backs were superb," Zuppke protested. "You're the greatest back-field coach in the country. I never saw faster moving backs; they get under way like lightning."

"Yes," Dobie agreed funereally, "that's the trouble with them—they get to the tacklers too soon."

Such a Homeric struggle as this 21 to 21 tie is a pretty good place to end this story, and I shall make the epilogue brief. Northwestern was laying for us the following Saturday and gave us a close fit, twice stopping a triumphal march of ours down the field. We thought we had a possible chance at the championship and we played to win, not to tie. In doing so Curley broke all the rules of caution twice in the march from near our own goal line to the point where he kicked a goal in the last quarter to win, 3 to 0. Twice he tried for a four-yard gain with McCarty on fourth down near our own goal line, and each time McCarty went through. It was hair-raising chance taking, but I heartily approved of it.

As it turned out, Minnesota defeated Illinois that afternoon, giving us the highest percentage in the Conference.

We stopped Grange in the Conference in 1925 by seeing to it that he never got a start—the only possible method of spiking Number 77. True to the Urbana tradition, the weather for our 1925 Illinois game was atrocious. The whole season had been affected by rain, but this day driving sheets of cold water almost shut off each side of the stadium from the view of the other. We were prepared to beat them and competent to the job, but we fumbled ourselves to death after getting the jump. McCarty ripped through their line as of old, and by steady plunging carried the ball thirty-five yards to the five-yard line in the first quarter, only to have it slip out of his grasp. In the second quarter Grange fumbled on the Illinois twenty-five-yard line, McCarty recovered the ball, broke through for fifteen yards on the next play, and went over for a touchdown soon after.

We were on Easy Street, with a six-point lead, when we fumbled on our own thirty-eight-yard line, recovered the ball, but at a cost of twenty yards; then fumbled again on fourth down to give Illinois the ball near our goal line. They failed to carry it over, losing it to us on downs. We had to punt out from behind the goal line, fumbled and kicked it and Illinois got the ball on our three-yard

line, to carry it over and tie the score. McCarty was hurt in this quarter and lost to us. In the third quarter two successive fumbles put the ball back on our goal line again. Rouse's punt was blocked and again Illinois fell on the ball, this time behind our goal line.

We tied Ohio State by the annual 3 to 3, lost to Penn, Wisconsin and Dartmouth and defeated only Kentucky, Northwestern and Purdue. In 1924 I had gone East to look at various college field houses and had stopped off at Hanover in early September. Jess Hawley and his Dartmouth squad already were on hand, and Hawley invited me to lunch with Professor Richardson, chairman of the athletic board. They proposed a game for 1925.

Too Much Oberlander was our epitaph. It was worth a 7 to 33 defeat to see his forward-passing, as accurate as a rifle shot, and there were ten other men on the Green team.

We graduated fifteen letter men leaving a weak squad to start the 1926 season. It lived up to the forecast, losing six out of eight games, to Pennsylvania, Purdue, Ohio, Illinois, Northwestern, and Wisconsin in succession, but it was a splendid fighting bunch and was loyally supported by students, alumni and the public.

We start the 1927 season with a relatively stronger squad, but there is the final whistle, and I am no Dick Marshall of Penn. In the 1912

Michigan-Pennsylvania game, in which Michigan had led 21 to 0 and Penn stubbornly had fought its way up to within one point of equality, the whistle blew for the end of the game with a Michigan punt still in the air. One play only, under the rules, could save the kids from West Philly, and Marshall did it by running sixty yards for a touchdown, which, with a kicked goal, won 27 to 21 for Penn. That's the way to end a game or a story, but the best I can do is to quote the University of Chicago song. The lyrics were written overnight in 1893 on a rush order by Edwin H. Lewis. The leader of the newly organized men's glee club had discovered the lack of a school song the day before their first concert and applied to Mr. Lewis, then an assistant in rhetoric. One stanza goes:

The City White hath fled the earth;
But where the azure waters lie
A nobler city hath its birth,
The City Gray that ne'er shall die.
For decades and for centuries
Its battlemented towers shall rise
Beneath the hope-filled western skies.

These western skies still are, in 1927 hope-filled.

UNIVERSITY OF MIAMI

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